

JVC

SERVICE MANUAL

COLOUR TELEVISION

AV-21TS4EK_(C) AV-25TS4EK_(C)

BASIC CHASSIS

JH

Supplementary

The following item for the AV-21TS4EK(C) / AV-25TS4EK(C) model were changed from those of the AV-21TS4EP / AV-25TS4EP model.

Therefore, this service manual describes only the items which differ from those of the AV-21TS4EP / AV-25TS4EP service manual.

For details other than those described in this manual, please refer the AV-21TS4EP / AV-25TS4EP service manual (No.51523, Feb., 1999).

■ DIFFERENCE PARTS LIST

• EXPLODED VIEW & PACKING PARTS LIST (AV-21TS4EK : Page34, 43)

△	Ref. No.	Model No. & Parts No.		Parts Name	Remarks
		AV-21TS4EK (No.51525)	AV-21TS4EK(C) (No.51525C)		
△	V01	A51EAL155X01	A51EER133X69	PICTURE TUBE	Not Interchangeable
△	T1551	QQH0036-002	QQH0078-001	HVT	↑
△	5	LC20075-022A-U	LC20075-029A-U	RATING LABEL	↑
	7	AEM1039-021-E	AEM1052-006-E	EURO LABEL	↑

• EXPLODED VIEW & PACKING PARTS LIST (AV-25TS4EK : Page44, 52)

△	Ref. No.	Model No. & Parts No.		Parts Name	Remarks
		AV-25TS4EK (No.51525)	AV-25TS4EK(C) (No.51525C)		
△	V01	A59ECF50X05	A59EEQ15X93	PICTURE TUBE	Not Interchangeable
△	T1551	QQH0050-002-I2	QQH0079-001	HVT	↑
△	5	LC20075-021A-U	LC20075-028A-U	RATING LABEL	↑
	7	AEM1039-017-E	AEM1052-011-E	EURO LABEL	↑

• PRINTED WIRING BOARD PARTS LIST (AV-21TS4EK : Page46)

Δ	Ref. No.	Model No. & Parts No.		Parts Name	Remarks
		AV-21TS4EK (No.51525)	AV-21TS4EK(C) (No.51525C)		

MAIN PWB

		SJH-1903A-U2	SJH-1907A-U2	MAIN PWB	
Δ	R1585	QRA14CF-3902Y	QRA14CF-1802Y	MF RESISTER	18k Ω 1/4W F
Δ	R1586	QRA14CF-4991Y	QRA14CF-3091Y	MF RESISTER	3.09k Ω 1/4W F
	C1126	QETN1CM-476Z	QETN1EM-476Z	E CAP.	47 μ F 25V M
Δ	C1521	QFZ0152-9501	QFZ0198-103	MPP CAP.	0.01 μ F 1.5kVH \pm 3%
	C1807	QETN1CM-476Z	QETN1EM-476Z	E CAP.	47 μ F 25V M
	C1852		QETN1EM-476Z	E CAP.	47 μ F 25V M
	C1708		QCB31HK-102Z	C CAP.	1000pF 50V K
	L1551	QQLZ018-640	QQLZ026-410	HEATER CHOKE	

FRONT CONTROL PWB

		SJH-8005A-U2	SJH-8008A-U2	FRONT CONTROL PWB	
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PFC PWB

			SJH-9002A-U2	PFC PWB	addition
	L9901		QQR0646-007	CHOKE COIL	addition

• PRINTED WIRING BOARD PARTS LIST (AV-25TS4EK : Page55)

Δ	Ref. No.	Model No. & Parts No.		Parts Name	Remarks
		AV-25TS4EK (No.51525)	AV-25TS4EK(C) (No.51525C)		

MAIN PWB

		SJH-1902A-U2	SJH-1906A-U2	MAIN PWB	
Δ	R1585	QRA14CF-1582Y	QRA14CF-1802Y	MF RESISTER	18k Ω 1/4W F
Δ	R1586	QRA14CF-2941Y	QRA14CF-3091Y	MF RESISTER	3.09k Ω 1/4W F
	C1510	QEHC2CM-105Z	QEHR2CM-105Z	E CAP.	1 μ F 160V M
Δ	C1523	QFP32GJ-333	QFP32GJ-273	PP CAP.	0.027 μ F 400V J
	C1526	QEHC2EM-475Z	QEHR2EM-475Z	E CAP.	4.7 μ F 250V M
	C1552-53	QEHB1EM-108	QEHQ1EM-108	E CAP.	1000 μ F 25V M
	C1582	QETN1CM-476Z	QETN1EM-476Z	E CAP.	47 μ F 25V M
	C1807	QETN1CM-476Z	QETN1EM-476Z	E CAP.	47 μ F 25V M
	C1965	QEHB1VM-108	QEHQ1VM-108	E CAP.	1000 μ F 35V M
	C1980	QEHC1AM-227Z	QEHR1AM-227Z	E CAP.	220 μ F 10V M
Δ	C1993	QCZ9079-332	QCZ9079-472	C CAP.	4700pF AC250V K
	L1551	QQLZ018-800	QQLZ026-500	HEATER CHOKE	

CRT SOCKET PWB

		SJH-3001A-U2	SJH-3003A-U2	CRT SOCKET PWB	
	C3113	QCZ0121-102		C CAP.	
	C3125		QFZ0097-103	MM CAP.	0.01 μ F 1250V K
	D3123	MA3068/M/-X	MA3082/L/-X	CHIP ZENE	

FRONT CONTROL PWB

		SJH-8002A-U2	SJH-8006A-U2	FRONT CONTROL PWB	
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PFC PWB

			SJH-9001A-U2	PFC PWB	addition
	L9901		QQR0646-007	CHOKE COIL	addition



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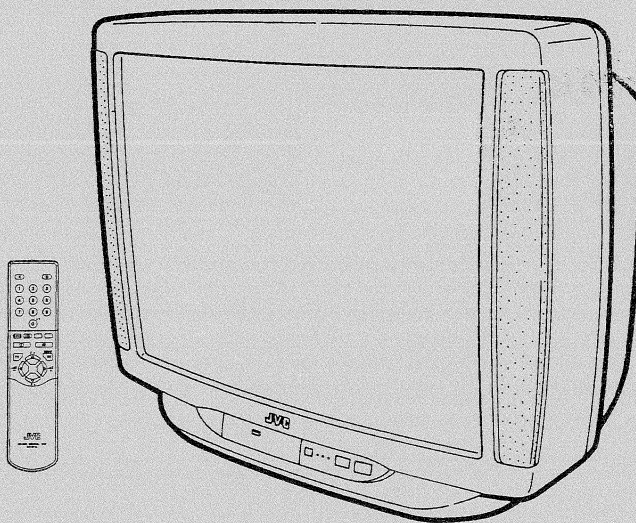
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AV-25TS4EE AV-25TS4EN AV-25TS4EP



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SPECIFICATIONS

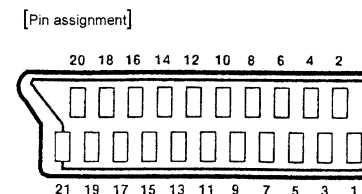
Item	Content		
	AV-25TS4EE	AV-25TS4EN	AV-25TS4EP
Dimensions (W × H × D)	66.3 × 51.7 × 47.2cm		
Mass	26.9kg		
TV RF System	CCIR(B/G, D/K)	CCIR(B/G, I)	CCIR(B/G, L, I)
Colour System	PAL/SECAM/NTSC(Only in EXT mode)		
Stereo System	A2/NICAM		
Teletext System	Fastext(United Kingdom system), WST(Standard system)	Fastext(United Kingdom system), TOP(German system) WST(Standard system)	Fastext(United Kingdom system), TOP(German system) WST(Standard system)
Receiving Freq.	VHF(L) 47MHz~88MHz VHF(H) 174MHz~230MHz UHF 470MHz~862MHz CATV(M) 68MHz~175MHz CATV(S) 230MHz~301MHz CATV(H) 302MHz~470MHz		
Intermediate Freq.	VIF Carrier 38.9MHz(B/G, D/K) SIF Carrier 33.4(5.5MHz : B/G) 32.4(6.5MHz : D/K)	38.9MHz(B/G, I) 33.4(5.5MHz : B/G) 32.9(6.0MHz : I)	38.9MHz(L B/G, I)/34.25MHz(L') 33.4(5.5MHz : B/G) 32.9(6.0MHz : I) 32.4(6.5MHz : L) / 40.75 (6.5MHz : L')
Colour Sub Carrier Freq.	PAL 4.43MHz SECAM 4.40625MHz/4.25MHz NTSC 3.58MHz/4.43MHz		
Aerial Input Term	75 Ω Unbalanced, Coaxial		
Power Input	220V ~ 240V AC 50Hz		
Power Consumption	134W(Max) / 90W(Avg), 90W/h(ITALY)		
Picture Tube	Visible size : 59cm, Measured diagonally		
High Voltage	28.0kV +1kV -1.5kV (at zero beam current)		
Speaker	5 × 12cm Oval Type, 8 Ω × 2		
Audio Output	5W × 5W		
EXT-1/EXT-2(Input/Output)	21-pin Euro connector(SCART socket)		
EXT-3(Input)	1Vp-p 75 Ω(RCA pin jack)		
Video	500mVrms(-4dBs), High Impedance (RCA pin jack)		
Audio(L/R)	500mVrms(-4dBs), High Impedance (RCA pin jack)		
Headphone jack	Stereo mini jack (φ 3.5mm)		
Remote Control Unit	RM-C795 AAA(R03) dry battery × 2		

Design & specifications are subject to change without notice.

21-pin Euro connector (SCART socket) : EXT-1 / EXT-2

(P-P= Peak to Peak, S-W= Sync tip to white peak, B-W= Blanking to white peak)

Pin No.	Signal Designation	Matching Value	EXT-1	EXT-2
1	AUDIO R output	500mVrms(Nominal), Low impedance	○ (TV OUT)	○ (TV/LINE OUT)
2	AUDIO R input	500mVrms(Nominal), High impedance	○	○
3	AUDIO L output	500mVrms(Nominal), Low impedance	○ (TV OUT)	○ (TV/LINE OUT)
4	AUDIO GND		○	○
5	GND (B)		○	○
6	AUDIO L input	500mVrms(Nominal), High impedance	○	○
7	B input	700mV _{B-W} , 75 Ω	○	NC
8	FUNCTION SW (SLOW SW)	Low : 0-3V, High : 8-12V, High impedance	○	○
9	GND (G)		○	○
10	MEMORY PACK / TV LINK		NC	○
11	G input	700mV _{B-W} , 75 Ω	○	NC
12	SDA3		NC	○
13	GND (R)		○	○
14	GND (Y _S)		○	NC
15	R / C input	R : 700mV _{B-W} , 75 Ω C : 300mV _{P-P} , 75 Ω	○ (R/C)	○ (only C)
16	Ys input	Low : 0 - 0.4, High : 1 - 3V, 75 Ω	○	NC
17	GND(VIDEO output)		○	○
18	GND(VIDEO input)		○	○
19	VIDEO output	1V _{P-P} (Negative going sync), 75 Ω [Use the adjustment of DETECTOR LEVEL]	○ (TV)	○ (TV/LINE OUT)
20	VIDEO / Y input	1V _{P-P} (Negative going sync), 75 Ω	○	○
21	COMMON GND		○	○



SAFETY PRECAUTIONS

1.

The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2.

Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3.

Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (Δ) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.
4.

Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.

Some models power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⌚) side GND, the ISOLATED(NEUTRAL) : (⌚) side GND and EARTH : (⊕) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.

If above note will not be kept, a fuse or any parts will be broken.
5.

If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).
6.

The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.
7.

Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.
8.

When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

9.

Isolation Check

(Safety for Electrical Shock Hazard)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
- (1)

Dielectric Strength Test

The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second.

(... Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)

This method of test requires a test equipment not generally found in the service trade.
- (2)

Leakage Current Check

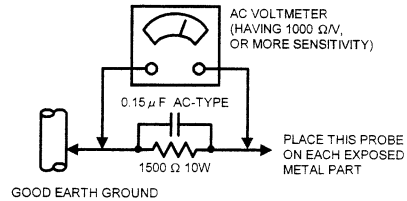
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).

However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

● Alternate Check Method

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).

However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



FEATURES

1.

The TELETEXT SYSTEM has a built-in FASTEXT, TOP(Except : AV-25TS4EE) & WST system.
2.

By means of AUTO PROGRAM, the TV stations can be selected automatically and the TV channels can also be rearranged automatically.
3.

Built-in ECO (ECONOMY, ECOLOGY) MODE.

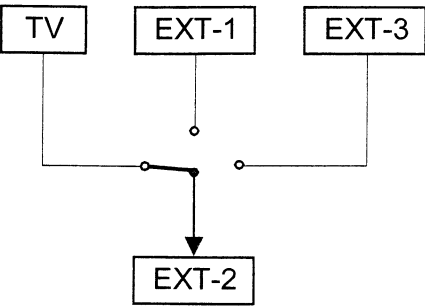
In accordance with the brightness in a room, the brightness and / or contrast of the picture can be adjusted automatically to make the optimum picture which is easy on the eye.
4.

The audio circuit has a built-in A2/NICAM stereo system.
5.

The EXT-2 TERMINAL (21-pin Euro connector) can select the output circuit as shown figure.
6.

Built-in TV-LINK.
7.

Built-in VARIABLE AUDIO OUT.



MAIN DIFFERENCE PARTS LIST

Δ	Parts Name	AV-25TS4EE	AV-25TS4EN	AV-25TS4EP
	MAIN PWB	SJH-1302A-U2	SJH-1002A-U2	SJH-1702A-U2
	IF PWB	SJH0F301A-U2	SJH0F001A-U2	SJH0F701A-U2
Δ	INST BOOK	LCT0300-001A-U	LCT0297-001A-U LCT0298-001A-U	LC0299-001A-U
	ADDRESS CARD	×	BT-20066A-E	←
	WARRANTY CARD	×	BT-54008-1E	←
	X-RAY CARD	×	LC10102-007A-U	×
Δ	RATING LABEL	LC20230-002A-U	LC20076-005A-U LC20078-009A-U	LC20079-004A-U
	EURO LABEL	AEM1038-047-E	AEM1039-018-E	AEM1039-019-E
	WARNING LABEL	LC30671-001A-U	×	×
	S. DIAGRAM	×	25TS4EN-HSAE (Only ITALY)	×

SPECIFIC SERVICE INSTRUCTIONS

DISASSEMBLY PROCEDURE

REMOVING THE REAR COVER

1. Unplug the power cord.
2. Remove the 9 screws marked "X" as shown in the figure.
3. Withdraw the rear cover toward you.

REMOVING THE CHASSIS

- After removing the rear cover.
1. Slightly raise the both sides of the chassis by hand and remove the two claws under the both sides of the chassis from the front cabinet.
 2. Withdraw the chassis backward.
(If necessary, take off the wire clamp, connectors etc.)

REMOVING THE AV TERM. BOARD

- After removing the rear cover.
1. Remove the 1 screw marked "Z" as shown in the figure.
 2. While raising the claw marked "A", remove the top of the AV TERM. Board slightly in the direction of arrow "B" as shown in Fig. 1.
 3. Pressing the claws marked "C", remove the AV TERM. Board in the arrow direction marked "D" as shown in Fig. 2.

REMOVING THE CONTROL BASE

1. While pushing down the claws marked "E", remove the CONTROL BASE in the arrow direction "F" as shown in Fig. 3.
(If necessary, take off the wire clamp, connectors etc.)

REMOVING THE SPEAKER

- After removing the rear cover.
1. Remove the two screws marked "Y" as shown in figure.
 2. Follow the same steps when removing the other hand speaker.

CHECKING THE PW BOARD

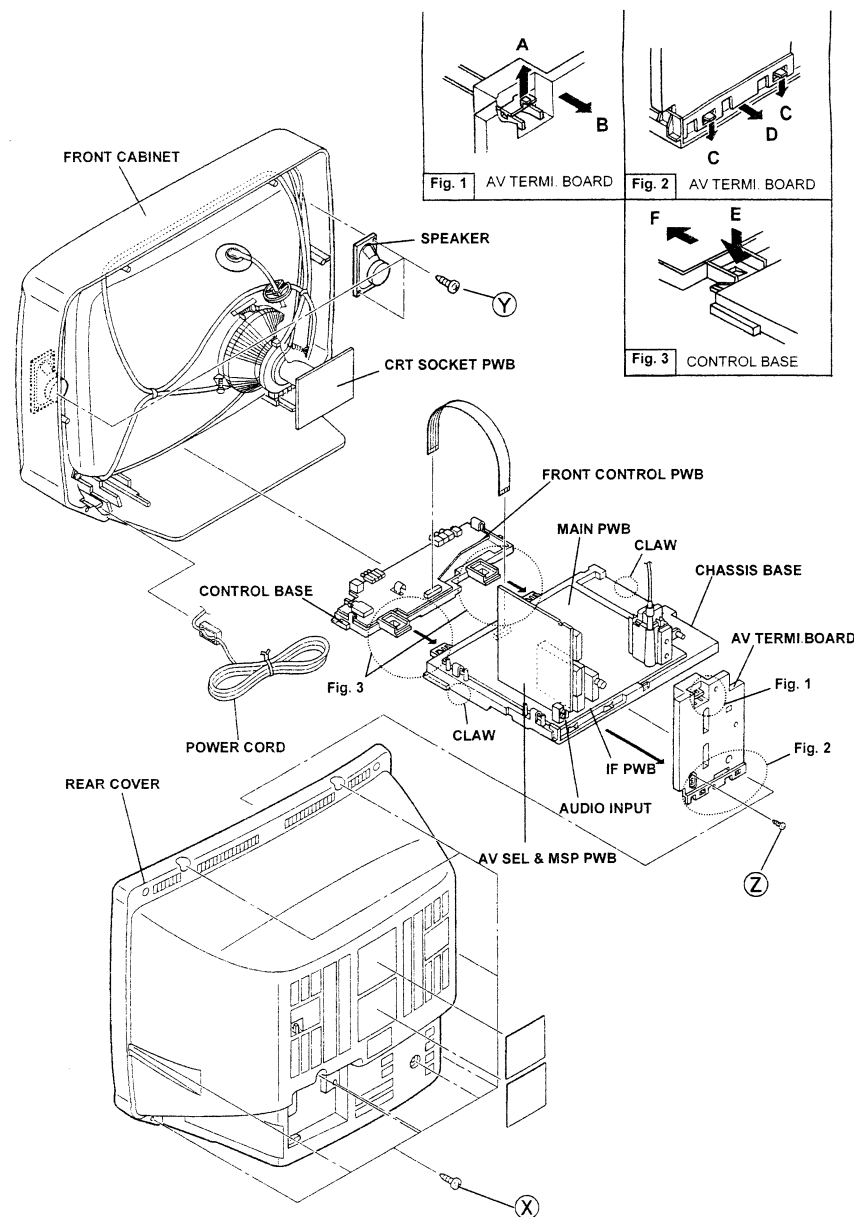
1. To check the back side of the PW Board.
 - 1) Pull out the chassis. (Refer to REMOVING THE CHASSIS).
 - 2) Erect the chassis vertically so that you can easily check the back side of the PW Board.

[CAUTION]

- When erecting the chassis, be careful so that there will be no contacting with other PW Board.
- Before turning on power, make sure that the wire connector is properly connected.

WIRE CLAMPING AND CABLE TIES

1. Be sure to clamp the wire.
2. Never remove the cable tie used for tying the wires together.
Should it be inadvertently removed, be sure to tie the wires with a new cable tie.



REPLACEMENT OF MEMORY ICs

1. Memory ICs

This TV uses memory ICs. In the memory ICs, there are memorized data for correctly operating the video and deflection circuits. When replacing memory ICs, be sure to use ICs written with the initial data values.

2. Procedure for replacing memory ICs

PROCEDURE	
(1) Power off	Switch the power off and unplug the power cord from the outlet.
(2) Replace ICs	Be sure to use memory ICs written with the initial data values.
(3) Power on	Plug the power cord into the outlet and switch the power on.
(4) Check and set SYSTEM CONSTANT SET:	<ol style="list-style-type: none"> Press the INFORMATION key and the MUTING key of the REMOTE CONTROL UNIT simultaneously. The SERVICE MENU screen of Fig. 1 will be displayed. While the SERVICE MENU is displayed press the INFORMATION key and MUTING key simultaneously, and the SYSTEM CONSTANT SET screen of Fig. 2 will be displayed. Check the setting values of the SYSTEM CONSTANT SET of Table 1. If the value is different, select the setting item with the FUNCTION UP/DOWN key, and set the correct value with the FUNCTION +/- key. Press the MENU key and memorize the setting value. Press the INFORMATION key twice, and return to the normal screen.
(5) Setting of receive channels	Set the receive channel. For setting, refer to the OPERATING INSTRUCTIONS.
(6) User settings	Check the user setting values of Table 2, and if setting value is different, set the correct value. For setting, refer to the OPERATING INSTRUCTIONS.
(7) Setting of SERVICE MENU	Verify the setting items of the SERVICE MENU of Table 3, and reset where necessary. For setting, refer to the SERVICE ADJUSTMENTS.

SERVICE MENU

SERVICE MENU

1.IF 2.V/C
3.AUDIO 4.DEF
5.VSM PRESET 6.VPS
7.AUDIO PROGRAM (OFF)
8.MAX VOLUME

1-8.SELECT []:EXIT

Fig.1

SYSTEM CONSTANT SET

SYSTEM CONSTANT SET

MODEL=TS4 (V* ****)

1.COUNTRY : **
2.INCH : 25

- + [] STORE [] EXIT
JVC JH BASIC V01
***** - *****

Fig.2

NAME OF REMOTE CONTROL KEY

Names of key	key
INFORMATION	[]
MUTING	[]
MENU	[OK]
FUNCTION UP/DOWN	[]
FUNCTION +/-	[]

SETTING VALUES OF SYSTEM CONSTANT SET

Setting item	Setting content	Setting value		
		AV-25TS4EE	AV-25TS4EN	AV-25TS4EP
1. COUNTRY	EE → IR → UK → EN → EP	EE	EN	EP
2. INCH	21 → 25 → 29	25	25	25

Table 1

USER SETTING VALUES

Setting item	Setting value	Setting item	Setting value
SUB POWER	ON	COOL/NORMAL	COOL
CHANNEL	1 POSITION	SLEEP TIMER	OFF
CHANNEL PRESET	See OPERATING INSTRUCTIONS	TV SPEAKER	ON
VOLUME	Appropriate sound volume	BLUE BACK	ON
TV / EXT	TV	ZOOM	REGULAR
DISPLAY	CHANNEL DISPLAY	TONE	OFF
COLOUR SYSTEM	TV / PAL	BALANCE/BASS/TREBLE	CENTER
HYPER SOUND	OFF	LANGUAGE	ENGLISH
		CHILD LOCK	ID No. * * * * *

Table 2

SERVICE MENU SETTING ITEMS

Setting item	Setting value	Setting item	Setting value
1. IF	1. VCO 2. DELAY POINT 3. LV LEVEL(Only AV-25TS4EP)	4. DEF.	1. TRAPEZ 2. V-SHIFT 3. V-SIZE 4. H-CENT 5. H-SIZE 6. EW-PIN 7. V-S. CR 8. V-EDGE 9. EW-COR 11. ABL POINT(Do not adjust) 12. ABL GAIN(Do not adjust)
2. V/C	1. CUT OFF (R, G, B) 2. DRIVE (R, B) 3. BRIGHT 4. CONT. 5. COLOUR(PAL/SECAM/NTSC) 6. TINT(NTSC) 7. BLACK OFFSET(SECAM) 8. SHARP 9. TEXT (R, G, B)CONT 10. DC TRAN RATE (Do not adjust) 11. BLACK STRETCH 12. B.S.OFF	5. VSM PRESET (COOL/NORMAL/WARM)	1. BRIGHT 2. CONT. 3. COLOUR 4. SHARP 5. TINT 6. R DRIVE 7. B DRIVE 8. BASS 9. TREBLE
3. AUDIO (Do not adjust)	1. CONC LIMIT 2. A2 ID THR	6. VPS (Do not adjust)	VPS
8. MAX VOLUME	LEVEL	7. AUTO PROGRAM (Do not adjust)	ON / OFF

Table 3

REPLACEMENT OF CHIP COMPONENT

CAUTIONS

- 1. Avoid heating for more than 3 seconds.
- 2. Do not rub the electrodes and the resist parts of the pattern.
- 3. When removing a chip part, melt the solder adequately.
- 4. Do not reuse a chip part after removing it.

SOLDERING IRON

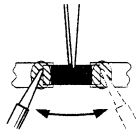
- 1. Use a high insulation soldering iron with a thin pointed end of it.
- 2. A 30w soldering iron is recommended for easily removing parts.

REPLACEMENT STEPS

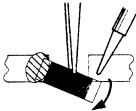
1. How to remove Chip parts

Resistors, capacitors, etc.

- (1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.



- (2) Shift with tweezers and remove the chip part.



Transistors, diodes, variable resistors, etc.

- (1) Apply extra solder to each lead.



- (2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.

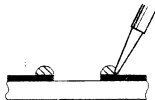


Note : After removing the part, remove remaining solder from the pattern.

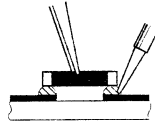
2. How to install Chip parts

Resistors, capacitors, etc.

- (1) Apply solder to the pattern as indicated in the figure.

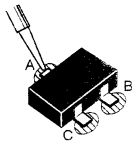


- (2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

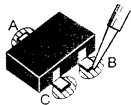


Transistors, diodes, variable resistors, etc.

- (1) Apply solder to the pattern as indicated in the figure.
- (2) Grasp the chip part with tweezers and place it on the solder.
- (3) First solder lead A as indicated in the figure.



- (4) Then solder leads B and C.



SERVICE ADJUSTMENTS

BEFORE STARTING SERVICE ADJUSTMENT

- 1. There are 2 ways of adjusting this TV: One is with the REMOTE CONTROL UNIT and the other is the conventional method using adjustment parts and components.
- 2. The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values. The setting values which adjust the screen to the optimum condition can be different from the initial setting values.
- 3. Make sure that connection is correctly made to AC power source.
- 4. Turn on the power of the TV and measuring instrument for warming up for at least 30 minutes before starting adjustment.
- 5. If the receive or input signal is not specified, use the most appropriate signal for adjustment.
- 6. Never touch parts (such as variable resistors, transformers and condensers) not shown in the adjustment items of this service adjustment.

- 7. Preparation for adjustment (presetting):
Unless otherwise specified in the adjustment items, preset the following functions with the REMOTE CONTROL UNIT:

(1) PICTURE MODE (VSM)	COOL
(2) SLEEP TIMER	OFF
(3) HYPER SOUND	OFF
(4) BALANCE	CENTER
(5) ECO	OFF
(6) ZOOM	REGULAR

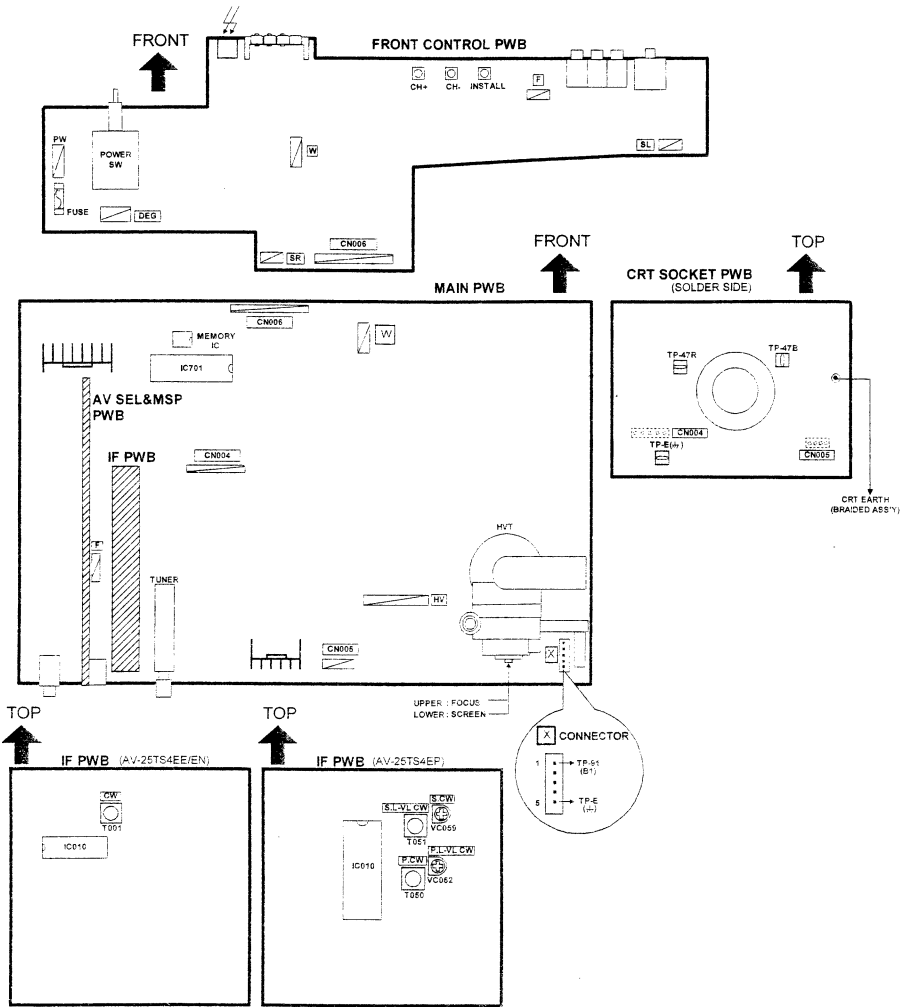
MEASUREING INSTRUMENT AND FIXTURES

- 1. DC voltmeter (or digital voltmeter)
- 2. Oscilloscope
- 3. Signal generator (Pattern generator) [PAL/SECAM/NTSC]
- 4. Remote control unit

ADJUSTMENT ITEMS

Adjustment item	Adjustment item
B1 POWER SUPPLY CHECK	VIDEO/CHROMA CIRCUIT ADJUSTMENT
FOCUS ADJUSTMENT	DEFLECTION CIRCUIT ADJUSTMENT
IF CIRCUIT ADJUSTMENT	AUDIO CIRCUIT (Do not adjust.)
VSM PRESET ADJUST SETTING	SETTING OF MAX VOLUME

ADJUSTMENT LOCATIONS



BASIC OPERATION OF SERVICE MENU

1. TOOL OF SERVICE MENU OPERATION
- Operate the SERVICE MENU with the REMOTE CONTROL UNIT.
2. SERVICE MENU ITEMS
- With the SERVICE MENU, various settings (adjustments) can be made, and they are broadly classified in the following items of settings (adjustments):
- (1) 1. IF

..... This mode adjusts the setting values of the IF circuit.
- (2) 2.V/C

..... This mode adjusts the setting values of the VIDEO / CHROMA circuit.
- (3) 3.AUDIO

..... This mode adjusts the setting values of the multiplicity SOUND circuit.
- (4) 4.DEF

..... This mode adjusts the setting values of the DEFLECTION circuit.
- (5) 5.VSM PRSET

..... This mode adjusts the initial setting values of COOL, NORMAL and WARM.

(VSM : video status memory)
- (6) 6.VPS

..... This mode shows the monitor of the VPS and PDC.(Do not adjust).

(VPS : Video Program System, PDC : Program Delivery Code)
- (7) 7.AUTO PROGRAM

..... This mode set the values at the time of shipment from the factory. (Do not adjust)
- (8) 8.MAX VOLUME

..... This mode adjusts the MAX VOLUME. (Do not adjust under normal condition)

3. BASIC OPERATION OF SERVICE MENU

- (1) How to enter SERVICE MENU
- Press the INFORMATION key and the MUTING key of the REMOTE CONTROL UNIT simultaneously, and the SERVICE MENU screen of Fig. 1 will be displayed.

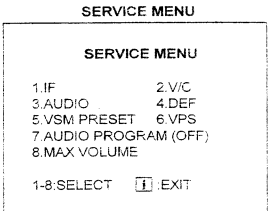


Fig.1

(2) Selection of SUB MENU SCREEN

Press one of keys 1~8 of the REMOTE CONTROL UNIT and select the SUB MENU SCREEN (See Fig. 3). form the SERVICE MENU.

- SERVICE MENU → SUB MENU
1. IF

2. V / C

3. AUDIO

4. DEF.

5. VSM PRESET

6. VPS

7. AUTO PROGRAM

8. MAX VOLUME

NAME OF REMOTE CONTROL KEY

Names of key	key
INFORMATION	
MUTING	
MENU	
FUNCTION UP/DOWN	
FUNCTION +/-	

Fig.2

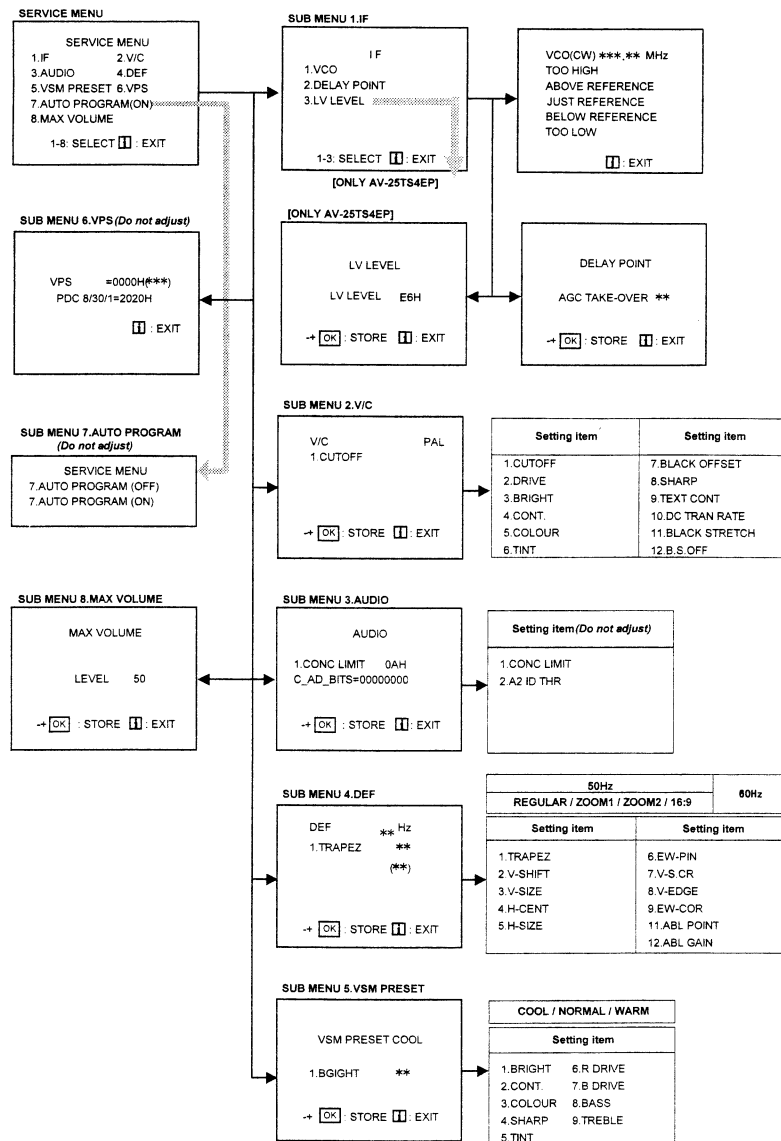


Fig. 3 SUB MENU SCREEN

(3) Method of Setting

1) Method of Setting 1.IF

[1. VCO]

- ① 1 Key Select 1.IF.
- ② 1 Key Select 1.VCO
- ③ The VCO (CW) screen will be displayed in yellow when the AFC voltage is at a certain level and in blue when it is at other levels.
- ④ INFORMATION Key As you press this twice, you will return to the **SERVICE MENU**.

[2. DELAY POINT]

- ① 1 Key Select 1.IF.
- ② 2 Key Select 2.DELAY POINT.
- ③ FUNCTION +/- Set (adjust) the setting values of the setting items.
- ④ MENU Key Memorize the set value.
(Before storing the setting values in memory, do not press the INFORMATION, TV, POWER ON / OFF keys - if you do, the values will not be stored in memory.)
- ⑤ INFORMATION Key When this is pressed twice, you will return to the **SERVICE MENU**.

[3. LV LEVEL] (Only AV-25TS4EP)

- ① 1 Key Select 1.IF.
- ② 3 Key Select 3.LV LEVEL.
- ③ FUNCTION +/- Set (adjust) the setting values of the setting items.
(Before storing the setting values in memory, do not press the INFORMATION, TV, POWER ON / OFF keys - if you do, the values will not be stored in memory.)
- ④ MENU Key Memorize the set value.
- ⑤ INFORMATION Key When this is pressed twice, you will return to the **SERVICE MENU**.

2) Method of setting 2.V/C, 3.AUDIO, 4.DEF and 5.VSM PRESET.

- ① 2~6 Key Select one from 2. V/C, 3. AUDIO, 4. DEF and 5. VSM PRESET.
- ② FUNCTION UP/DOWN Key Select setting items.
- ③ FUNCTION +/- Set (adjust) the setting values of the setting items.
(Use the number keys of the REMOTE CONTROL UNIT for setting of WHITE BALANCE. For the setting, refer to each item concerned.)
- ④ MENU Key Memorize the setting value.
(Before storing the setting values in memory, do not press the INFORMATION, TV, POWER ON / OFF key - if you do, the values will not be stored in memory.)
- ⑤ INFORMATION Key Return to the **SERVICE MENU** screen.

3) Method of setting 6.VPS and 7.AUTO PROGRAM.

- 6.VPS This mode shows the monitor of the VPS and PDC (**Do not adjust**).
- 7.AUTO PROGRAM This mode initializes every existing set value collectively to the preset value at the time of shipment from the factory.

4) Method of setting 8.MAX VOLUME (Do not adjust under normal condition)

- ① 8 Key Select 8. MAX VOLUME.
- ② FUNCTION +/- Key Set (adjust) the setting values of the setting items.
- ③ MENU Key Memorize the setting value.
- ④ INFORMATION Key Return to the **SERVICE MENU** screen.

(4) Release of SERVICE MENU

- 1) After completing the setting, return to the **SERVICE MENU**, then again press the INFORMATION key.

B1 POWER SUPPLY

Item	Measuring instrument	Test point	Adjustment part	Description
Check of B1 Power SUPPLY	Signal generator DC voltmeter	TP-91(B1) TP-E(+) [X connector in MAIN PWB]		<div>1. Receive a whole black signal.</div> <div>2. Connect a DC voltmeter to TP-91(B1) and TP-E (+).</div> <div>3. Make sure that the voltage is DC149.5±2V.</div>




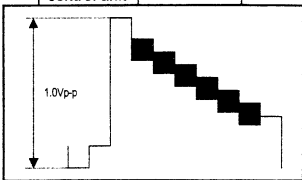
FOCUS ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of FOCUS	Signal generator		FOCUS VR [In HVT]	<div>1. Receive a cross-hatch signal.</div> <div>2. While watching the screen, adjust the FOCUS VR to make the vertical and horizontal lines as fine and sharp as possible.</div> <div>3. Make sure that when the screen is darkened, the lines remain in good focus.</div>

IF CIRCUIT ADJUSTMENT [For AV-25TS4EE / AV-25TS4EN]

Item	Measuring instrument	Test point	Adjustment part	Description																											
Adjustment of VCO	Remote control unit		P. CW TRANSF. (TOO1) [On IF PWB]	<ul style="list-style-type: none">It must not adjust without signal.Select 1.IF from the SERVICE MENU.Press 1 key and select 1.VCO.Select a receivable broadcast channel with the CHANNEL key.Turn the core of P. CW TRANSF. until the colour of the characters TOO HIGH displayed on the screen changes from blue to Yellow. (Step 1)Turn the core of P. CW TRANSF. until the colour of the characters TOO LOW changes from blue to Yellow. (Step 2)Then slowly turn back the core of P. CW TRANSF. until the colour of the characters JUST REFERENCE changes from blue to Yellow. (Step 3)Press the INFORMATION key three times to return to normal screen.Perform CHANNEL PRESET again, and make sure that each broadcast is being received properly.																											
<div><div><div>VCO(CW)MHz TOO HIGH ABOVE REFERENCE JUST REFERENCE BELOW REFERENCE TOO LOW EXIT</div><div><div>fv</div><div>YELLOW</div></div></div><table><thead><tr><th rowspan="2">Screen display</th><th colspan="3">Step</th></tr><tr><th>1</th><th>2</th><th>3</th></tr></thead><tbody><tr><td>TOO HIGH</td><td>Yellow</td><td>→ Blue</td><td>→ Blue</td></tr><tr><td>ABOVE REFERENCE</td><td>Blue</td><td>→ Blue</td><td>→ Blue</td></tr><tr><td>JUST REFERENCE</td><td>Blue</td><td>→ Blue</td><td>→ Yellow</td></tr><tr><td>BELOW REFERENCE</td><td>Blue</td><td>→ Blue</td><td>→ Blue</td></tr><tr><td>TOO LOW</td><td>Blue</td><td>→ Yellow</td><td>→ Blue</td></tr></tbody></table></div>					Screen display	Step			1	2	3	TOO HIGH	Yellow	→ Blue	→ Blue	ABOVE REFERENCE	Blue	→ Blue	→ Blue	JUST REFERENCE	Blue	→ Blue	→ Yellow	BELOW REFERENCE	Blue	→ Blue	→ Blue	TOO LOW	Blue	→ Yellow	→ Blue
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TOO LOW	Blue	→ Yellow	→ Blue																												
Adjustment of DELAY POINT	Remote control unit		DELAY POINT (AGC TAKE-OVER)	<ul style="list-style-type: none">Receive a black and white signal (colour off).Select 1.IF from the SERVICE MENU.Select 2.DELAY POINT by pressing the 2 key on the remote control.Adjust the FUNCTION - or + key until video noise disappears.Press the MENU key and memorize the set value.Turn to other channels and make sure that there are no irregularities.																											
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DELAY POINT (AGC TAKE-OVER)	00H~FFH	C0H																													

IF CIRCUIT ADJUSTMENT [FOR AV-25TS4EP]

Item	Measuring instrument	Test point	Adjustment part	Description																											
Adjustment of VCO	Remote control unit		P.CW TRANSF (T050) P.L-VL CW TRIM.C (C052) [On IF PWB]	<ul style="list-style-type: none">It must not adjust without signal.Select 1.IF from the SERVICE MENU.Press 1 key and select 1.VCO.Select a SECAM L or PAL broadcast channel with the CHANNEL key.Turn the core of P.CW TRANSF. until the colour of the characters TOO HIGH displayed on the screen changes from blue to Yellow. (Step 1)Turn the core of P.CW TRANSF. until the colour of the characters TOO LOW changes from blue to Yellow. (Step 2)Then slowly turn back the core of P.CW TRANSF. until the colour of the characters JUST REFERENCE changes from blue to Yellow. (Step 3)In the district SECAM L' broadcast, can be received select a SECAM L' broadcast channel with the CHANNEL key and adjust the P.L-VL CW TRIM.C in same manner as for above step. And as necessary, readjust P.CW TRANSF.Press the INFORMATION key three times to return to normal screen.Perform CHANNEL PRESET again, and make sure that each broadcast is being received properly.																											
<div><div>VCO(CW) ... MHz ← TOO HIGH ABOVE REFERENCE JUST REFERENCE BELOW REFERENCE TOO LOW  : EXIT</div><div> </div></div> <table><thead><tr><th rowspan="2">Screen display</th><th colspan="3">Step</th></tr><tr><th>1</th><th>2</th><th>3</th></tr></thead><tbody><tr><td>TOO HIGH</td><td>Yellow</td><td>Blue</td><td>Blue</td></tr><tr><td>ABOVE REFERENCE</td><td>Blue</td><td>Blue</td><td>Blue</td></tr><tr><td>JUST REFERENCE</td><td>Blue</td><td>Blue</td><td>Yellow</td></tr><tr><td>BELOW REFERENCE</td><td>Blue</td><td>Blue</td><td>Blue</td></tr><tr><td>TOO LOW</td><td>Blue</td><td>Yellow</td><td>Blue</td></tr></tbody></table>					Screen display	Step			1	2	3	TOO HIGH	Yellow	Blue	Blue	ABOVE REFERENCE	Blue	Blue	Blue	JUST REFERENCE	Blue	Blue	Yellow	BELOW REFERENCE	Blue	Blue	Blue	TOO LOW	Blue	Yellow	Blue
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Adjustment of DELAY POINT (AGC)	Signal generator Remote control unit		DELAY POINT (AGC TAKE-OVER)	<ol style="list-style-type: none">Receive a black and white signal (colour off).Select 1.IF from the SERVICE MENU.Select 2.DELAY POINT by pressing the 2 key on the remote control.Adjust the FUNCTION - or + key until video noise disappears.Press the MENU key and memorize the set value.Turn to other channels and make sure that there are no irregularities.																											
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Adjustment of L-DET. LEVEL	Signal generator Oscilloscope [H-rate] Remote control unit	EXT-1 ⑨ pin (TV OUT)		<ol style="list-style-type: none">Receive a SECAM-L full field colour bar signal (100% white).Connect an oscilloscope terminated 75Ω to EXT-1 terminal of ⑨pin (TV out).Select 1. IF from the SERVICE MENU.Press 3 key and select 3. LV LEVEL.Adjust the LV LEVEL by FUNCTION +/- key and make the wave detector output 1.0Vp-p.Press the MENU key and memorize the set value.																											
																															

VSM PRESET ADJUST SETTING

Item	Measuring instrument	Test point	Adjustment part	Description
Setting of VSM PRESET ADJUST	Remote control unit		<div>1. BRIGHT</div> <div>2. CONT.</div> <div>3. COLOUR</div> <div>4. SHARP</div> <div>5. TINT</div> <div>6. R DRIVE</div> <div>7. B DRIVE</div> <div>8. BASS</div> <div>9. TREBLE</div>	<div>1. Select 5.VSM PRESET from the SERVICE MENU.</div> <div>2. Select COOL with the PICTURE SETTING .</div> <div>3. Adjust the FUNCTION UP/DOWN and +/- key to bring the set values of 1.BRIGHT ~ 9.TREBLE to the values shown in the table.</div> <div>4. Press the MENU key and memorize the set value.</div> <div>5. Respectively select the VSM PRESET mode for NORMAL and WARM, and make similar adjustment as in 3 above.</div> <div>6. Press the MENU key and memorize the set value.</div> <div>* Refer to OPERATING INSTRUCTIONS for the PICTURE SETTING.</div>

<div>VSM preset mode</div>	COOL	NORMAL	WARM
Setting Item			
1. BRIGHT SETTING VALUE	+0	+0	+0
2. CONT. SETTING VALUE	+12	+10	+2
3. COLOUR SETTING VALUE	+6	+0	-2
4. SHARP SETTING VALUE	+0	+0	-2
5. TINT SETTING VALUE	+0	+0	+0
6. R DRIVE SETTING VALUE	-10	+15	+22
7. B DRIVE SETTING VALUE	-20	-25	-43
8. BASS SETTING VALUE	+2	+2	+2
9. TREBLE SETTING VALUE	+0	+0	+0

SETTING VALUES OF VSM PRESET

VIDEO/CHROMA CIRCUIT ADJUSTMENT

The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values.

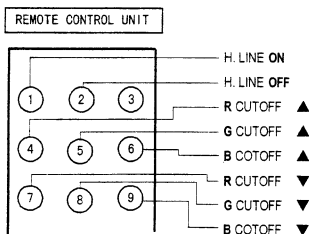
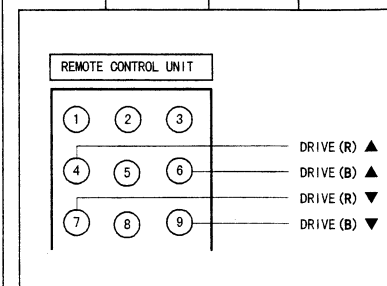
The setting values which adjust the screen to the optimum condition can be different from the initial setting values.

※ Items in () are automatically set to below table

Setting (adjustment) item	Variable range	Initial setting value	Colour system		Initial setting value			
			Setting (adjustment) item	Variable range	PAL	SECAM	NTSC 3.58	NTSC 4.43
1.CUT OFF	R	-128~+127	5. COLOUR	-128~+127	+00	←	+00	(+00)
	G	-128~+127	6.TINT	-64~+63	—	—	+00	(+00)
			7.BLACK OFF				(+00)	(+00)
	B	-128~+127	8.SHARP (Do not adjust)	-36~+27	-15 (Fixed)	←	+00 (Fixed)	(+00) (Fixed)
2.DRIVE	R	-118~+32	9.TEXT (RGB) CONT (Do not adjust)	-128~+127	-30 (Fixed)	←	—	—
	B	-31~+32	10.DC TRAN RATE (Do not adjust)	-08~-01	-08 (Fixed)	←	—	—
3.BRIGHT		-128~+127	11.BLACK STRETCH (Do not adjust)	-08~-01	-01 (Fixed)	←	—	—
4.CONT		-55~+31	12.B.S.OFF (Do not adjust)	ON / OFF	OFF (Fixed)	←	—	—

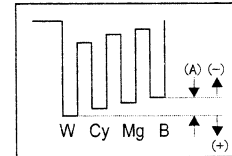
Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of WHITE BALANCE (Low Light)	Signal generator Remote control unite		1.CUT OFF (R) * * * (G) * * * (B) * * * SCREEN VR [In HVT]	<ol style="list-style-type: none"> 1. Receive a black and white signal(colour off). 2. Select 2. V/C from the SERVICE MENU. 3. Select 1.CUT OFF with the FUNCTION UP/DOWN key. 4. Show one horizontal line with the 1 key. With the SCREEN VR, adjust so that the horizontal line will not be too bright. 5. Gradually turn the SCREEN VR from the left end to the right direction to bring one of the red, green and blue colour faintly visible. 6. Press 4~9 key, and bring out the other 2 colours and make one horizontal line visible in white. 7. Turn the SCREEN VR and bring one white horizontal line faintly visible. 8. Press 2 key, turn off 1.CUT OFF screen. 9. Press the MENU key and memorize the set value.

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of WHITE BALANCE (High Light)	Signal generator Remote control unit		2.DRIVE (R) * * (B) * *	<ol style="list-style-type: none"> 1. Receive a black and white signal (colour off). 2. Select 2.V/C from the SERVICE MENU. 3. Select 2.DRIVE with the FUNCTION UP/DOWN key. 4. Change the screen colour to white with 4/7(R) key or 6/9(B) key. 5. Press the MENU key, and memorize the respective set values.
Adjustment of SUB BRIGHT	Remote control unit		3.BRIGHT	<ol style="list-style-type: none"> 1. Receive any broadcast. 2. Select 2.V/C from the SERVICE MENU. 3. Select 3.BRIGHT with the FUNCTION UP/DOWN key. 4. Set the initial setting value with the FUNCTION +/- key. 5. If the brightness is not the best with the initial set value, make fine adjustment until you get the best brightness. 6. Press the MENU key and memorize the set value.
Adjustment of SUB CONT.	Remote control unit		4.CONT.	<ol style="list-style-type: none"> 1. Receive any broadcast. 2. Select 2.V/C from the SERVICE MENU. 3. Select 4.CONT with the FUNCTION UP/DOWN key. 4. Set the initial setting value with the FUNCTION - or + key. 5. If the contrast is not the best with the initial set value, make fine adjustment until you get the best contrast. 6. Press the MENU key and memorize the set value.

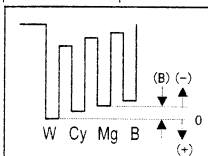


Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of SUB COLOUR I	Remote control unit		5.COLOUR (PAL~NTSC)	[Method of adjustment without measuring instrument]
			PAL COLOUR	(PAL COLOUR) 1. Receive any broadcast. 2. Select 2.V/C from the SERVICE MENU. 3. Select 5.COLOUR with the FUNCTION UP/DOWN key. 4. Set the initial setting value for PAL COLOUR with the FUNCTION - or + key. 5. If the colour is not the best with the initial set value, make fine adjustment until you get the best colour. 6. Press the MENU key and memorize the set value.
			SECAM COLOUR	(SECAM COLOUR) 1. Receive a SECAM broadcast. Make fine adjustment of SECAM COLOUR in the same manner as for above.
			NTSC COLOUR	(NTSC 3.58 COLOUR) 1. Input a NTSC 3.58MHz COMPOSITE VIDEO signal from the EXT terminal. 2. Make similar fine adjustment of NTSC 3.58 COLOUR in the same manner as for above. (NTSC 4.43 COLOUR) 1. When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.

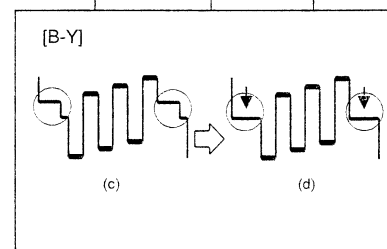
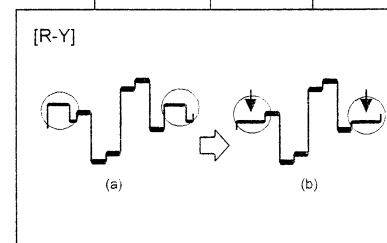
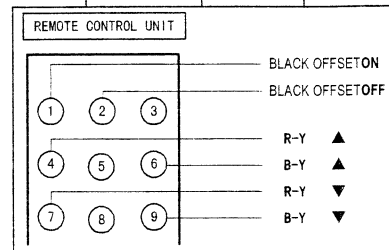
Item	Measuring instrument	Test point	Adjustment part	description
Adjustment of SUB COLOUR II	Signal generator Oscilloscope Remote control unit	TP-47B TP-E(↓) [CRT SOCET PWB]	5.COLOUR (PAL~NTSC)	[Method of adjustment using measuring instrument]
			PAL COLOUR	(PAL COLOUR) 1. Receive a PAL full field colour bar signal (75% white). 2. Select 2.V/C from the SERVICE MENU. 3. Select 5.COLOUR with the FUNCTION UP/DOWN key. 4. Set the initial setting value for PAL COLOUR with the FUNCTION - or + key. 5. Connect the oscilloscope between TP-47B and TP-E(↓). 6. Adjust PAL COLOUR and bring the value of (A) in the illustration to +2V (voltage difference between white and blue). 7. Press the MENU key and memorize the setting value.
			SECAM COLOUR	(SECAM COLOUR) 1. Receive a SECAM full field colour bar signal(75% white). 2. Set the initial setting value of SECAM COLOUR with the FUNCTION +/- key. 3. Adjust SECAM COLOUR and bring the value of (A) of the illustration to -1V (W~B). 4. Press the MENU key and memorize the setting value
			NTSC 3.58 COLOUR	(NTSC 3.58 COLOUR) 1. Input a NTSC 3.58MHz COMPOSITE VIDEO signal (full field colour bar with 75% white) from the EXT terminal. 2. Set the initial setting value of NTSC 3.58 COLOUR with the FUNCTION +/- key. 3. Adjust NTSC 3.58 COLOUR and bring the value of (A) of the illustration to -3V(W~B). 4. Press the MENU key and memorize the setting value. (NTSC 4.43 COLOUR) 1. When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.



Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of SUB TINT I	Remote control unit		6.TINT	[Method of adjustment without measuring instrument]
			NTSC 3.58 TINT	<p>[NTSC 3.58 TINT]</p> <ol style="list-style-type: none"> Input a NTSC 3.58MHz composite video signal (full field colour bar with 75% white) from the EXT terminal. Select 2.V/C from the SERVICE MENU. Select 6. TINT with the FUNCTION UP/DOWN key. Set the initial setting value of NTSC 3.58 TINT with the FUNCTION +/- key. If you cannot get the best tint with the initial setting value, make fine adjustment until you get the best tint. Press the MENU key and memorize the set value.
Adjustment of SUB TINT II	Signal generator Oscilloscope Remote control unit	TP-47B TP-E(⬇) [CRT SOCKET PWB]	6.TINT	[Method of adjustment using measuring instrument]
			NTSC 3.58 TINT	<p>[NTSC 3.58 TINT]</p> <ol style="list-style-type: none"> Input a NTSC 3.58MHz composite video signal (full field colour bar with 75% white) from the EXT terminal. Select 2.V/C from the SERVICE MENU. Select 6.TINT with the FUNCTION UP/DOWN key. Set the initial setting value of NTSC 3.58 TINT with the FUNCTION - or + key. Connect the oscilloscope between TP-47B and TP-E(⬇) Adjust NTSC 3.58 TINT to bring the value of (B) in the illustration to +5V (voltage difference between white and magenta). Press the MENU key and memorize the setting value
				<p>[NTSC 4.43 TINT]</p> <ol style="list-style-type: none"> When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.



Item	Measuring instrument	Test point	Adjustment part	description
Adjustment of BLACK OFFSET I (SECAM)	Remote control unit		7.BLACK OFFSET	[Method of adjustment without measuring instrument]
			(R-Y) *** (B-Y) ***	<ol style="list-style-type: none"> Receive a SECAM broadcast. Select 2. V/C from SERVICE MENU. Select 7. BLACK OFFSET with the FUNCTION UP/DOWN key. Set the initial setting value for BLACK OFFSET (R-Y) and (B-Y) with 4 and 7 or 6 and 9 keys of the remote control unit. If the picture is not the best with the initial setting value, make fine adjustment until you get the best picture. Press the MENU key and memorize the setting value.
Adjustment of BLACK OFFSET II (SECAM)	Signal generator Oscilloscope Remote control unit	35 PIN (R-Y) 36 PIN (B-Y) IC-101 OF MAIN PWB	7.BLACK OFFSET	[Method of adjustment using measuring instrument]
			(R-Y) *** (B-Y) ***	<ol style="list-style-type: none"> Receive a SECAM COLOUR bar signal (full field colour bar 75% white). Select 2. V/C from SERVICE MENU. Select 7. BLACK OFFSET with the FUNCTION UP/DOWN key. Connect the oscilloscope between 35 pin of IC-101 and TP-E. By using 4 and 7 keys of the remote control unit, adjust the BLACK OFFSET (R-Y) so that it becomes the waveform changes from (a) to (b) shown in the figure. Connect the oscilloscope between 36 pin of IC-101 and TP-E. By using 6 and 9 keys of the remote control unit, adjust the BLACK OFFSET (B-Y) so that it becomes the waveform changes from (c) to (d) shown in the figure. If the picture is not the best with the adjusted picture, make fine adjustment until you get the best picture. Press the MENU key and memorize the setting value.

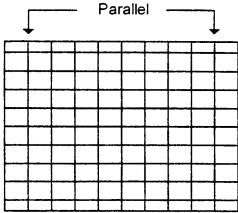
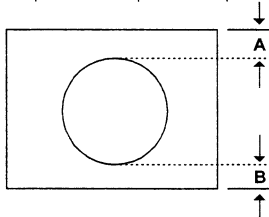
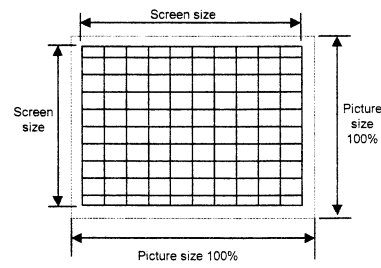


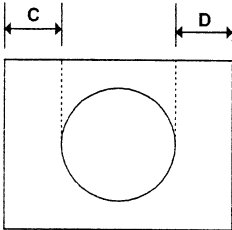
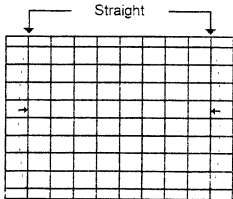
DEFLECTION CIRCUIT ADJUSTMENT

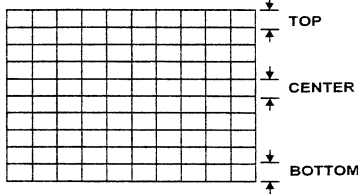
- There are 5 modes of adjustment ----- (1) 50Hz mode (①REGULAR, ②ZOOM1, ③ZOOM2, ④16:9) and (2) 60Hz mode (REGULAR) -
----- depending upon the kind of signals (VERTICAL FREQUENCY 50Hz / 60Hz).

- Adjustments in 50Hz REGULAR mode should be done always first.
- When the 50Hz REGULAR mode has been established, the setting of other modes will be done automatically. However, if the picture quality has not been optimized, adjust each mode again, respectively.
- The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values.
- The setting values which adjust the screen to the optimum condition can be different from the initial set values.

Setting (adjustment) Item	Adjustment name	Variable range	Initial setting value				
			50Hz mode				60Hz mode
			REGULAR	ZOOM1	ZOOM2	16:9	
1. TRAPEZ	Trapezoidal distortion correction	-32~+31	+18	-02	-03	+01	-02
2.V-SHIFT	Vertical center	-32~+31	-12	+05	+06	+05	+11
3.V-SIZE	Vertical hight	-64~+63	-28	+17	+26	-26	+01
4.H-CENT	Horizontal center	-16~+15	-08	-01	-01	-08	+05
5.H-SIZE	Horizontal width	-32~+31	+20	-04	-04	+00	-02
6.EW-PIN	Side pin correction	-32~+31	-09	+09	+14	-11	+00
7.V-S.CR	Vertical hight correction	-16~+15	+04	+04	+05	-08	+00
8.V-EDGE	Vertical edge correction	-08~+07	+07	+00	+00	+00	+00
9.EW-COR	Side pin for corner correction	-08~+07	+01	+05	+05	-05	+00
11.ABL POINT (Do not adjust)	Auto beam limited point	-08~-01	-04	←	←	←	←
12.ABL GAIN (Do not adjust)	Auto beam limited gain	-08~-01	-04	←	←	←	←

Item	Measuring instrument	Test point	Adjustment part	Description												
Adjustment of TRAPEZ	Signal generator Remote control unit		1.TRAPEZ	[50Hz REGULAR mode] 1. Receive a cross-hatch signal of vertical frequency 50Hz. 2. Select 4.DEF from the SERVICE MENU. 3. Select 1.TRAPEZ with the FUNCTION UP/DOWN key. 4. Set the initial setting value of TRAPEZ with the FUNCTION - or + key. 5. Adjust TRAPEZ and bring the VERTICAL lines at the right and left edges of the screen parallel . 6. Press the MENU key and memorize the set value.												
																
Adjustment of V-SHIFT			2.V-SHIFT	7. Receive a circle pattern signal 8. Select 2.V-SHIFT and set the initial setting value. 9. Adjust V-SHIFT to make A = B. 10. Press the MENU key and memorize the set value.												
																
Adjustment of V-SIZE			3.V. SIZE	11. Receive a cross-hatch signal. 12. Select 3.V-SIZE and set the initial setting value. 13. Adjust V-SIZE and make sure that the vertical screen size of the picture size is in the below table. 14. Press the MENU key and memorize the set value.												
																
				<table><tr><th></th><th>REGULAR</th><th>ZOOM1</th><th>ZOOM2</th></tr><tr><td>50Hz</td><td>92%</td><td>80%</td><td>74%</td></tr><tr><td>60Hz</td><td>90%</td><td>78%</td><td>72%</td></tr></table>		REGULAR	ZOOM1	ZOOM2	50Hz	92%	80%	74%	60Hz	90%	78%	72%
	REGULAR	ZOOM1	ZOOM2													
50Hz	92%	80%	74%													
60Hz	90%	78%	72%													

Item	Measuring instrument	Test point	Adjustment part	Description																													
Adjustment of H-CENTER			4.H-CENT.	<p>15. Receive a circle pattern signal.</p> <p>16. Select 4.H-CENT and set the initial setting value.</p> <p>17. Adjust H-CENT to make C=D.</p> <p>18. Press the MENU key and memorize the set value.</p>																													
																																	
Adjustment of H-SIZE			5.H-SIZE	<p>19. Receive a cross-hatch signal.</p> <p>20. Select 5.H-SIZE and set the initial setting value.</p> <p>21. Adjust H-SIZE and make sure that the horizontal screen size of the picture size is in the bellow table.</p> <p>22. Press the MENU key and memorize the set value.</p>																													
				<table><tr><th colspan="2">MODE</th><th>REGULAR</th><th>ZOOM1</th><th>ZOOM2</th></tr><tr><th>MODEL</th><th></th><th></th><th></th><th></th></tr><tr><td>AV-25TS4EE</td><td>50Hz</td><td>92%</td><td>85%</td><td>85%</td></tr><tr><td>AV-25TS4EN</td><td>60Hz</td><td>90%</td><td>83%</td><td>83%</td></tr><tr><td rowspan="2">AV-25TS4EP</td><td>50Hz</td><td>91%</td><td>85%</td><td>85%</td></tr><tr><td>60Hz</td><td>90%</td><td>83%</td><td>83%</td></tr></table>	MODE		REGULAR	ZOOM1	ZOOM2	MODEL					AV-25TS4EE	50Hz	92%	85%	85%	AV-25TS4EN	60Hz	90%	83%	83%	AV-25TS4EP	50Hz	91%	85%	85%	60Hz	90%	83%	83%
MODE		REGULAR	ZOOM1	ZOOM2																													
MODEL																																	
AV-25TS4EE	50Hz	92%	85%	85%																													
AV-25TS4EN	60Hz	90%	83%	83%																													
AV-25TS4EP	50Hz	91%	85%	85%																													
	60Hz	90%	83%	83%																													
Adjustment of EW-PIN			6.EW-PIN	<p>23. Select 6.EW-PIN and set the initial setting value</p> <p>24. Adjust EW-PIN and make the 1st vertical lines at the left and right edges of the screen straight. Also make sure that the 2nd vertical lines are also straight.</p> <p>25. Press the MENU key and memorize the set value.</p>																													
																																	

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of V-S.CR & V-EDGE			7. V-S.CR 8. V-EDGE	<p>• When the vertical linearity has been deteriorated remarkably, Perform the following steps.</p> <p>26. Receive a cross-hatch signal.</p> <p>27. Select 7. V- S.CR and set the initial setting value.</p> <p>28. Select 8. V-EDGE and set the initial setting value.</p> <p>29. Adjust 7. V-S.CR and 8. V-EDGE so that the spaces of each line on TOP, CENTER, and BOTTOM become uniform.</p> <p>30. Press the MENU Key and memorize the set value.</p>
				
Adjustment of EW-COR			9. EW-COR	<p>31. Select 9.EW-COR and set the initial setting value.</p> <p>32. Adjust EW-COR and make the vertical lines at the four corners of the screen straight.</p> <p>33. Press the MENU key and memorize the set value.</p>
				<p>31. Make sure that the adjustment is properly done on the screen of other mode.</p> <p>[NOTE]</p> <p>• When adjust again, adjust 50Hz mode first.</p>

AUDIO CIRCUIT

- Do not touch 3.AUDIO (1. CONC LIMIT, 2. A2 ID THR) of the SERVICE MENU as it requires no adjustment.

3. AUDIO

Setting item	Variable range	fixed value
1. CONC LIMIT(<i>Do not adjust</i>)	00H~FFH	0AH
2. A2 ID THR(<i>Do not adjust</i>)	00H~FFH	19H

SETTING of MAX VOLUME

● This model has a function that can set MAX VOLUME in the SERVICE MENU. (Do not adjust them under normal condition)

Item	Measuring instrument	Test point	Adjustment part	Description
Setting of MAX VOLUME	Remote Control unit		MAX VOLUME	1. Select 8. MAX VOLUME from the SERVICE MENU. 2. Set the setting value with the FUNCTION +/- key. 3. Usually, set the value to LEVEL 50.
<div><div>MAX VOLUME</div><div>LEVEL 50 ← SETTING VALUE</div><div>→ [OK] : STORE [II] : EXIT</div></div>				

PARTS LIST

CAUTION

- The parts identified by the \triangle symbol are important for the safety. Whenever replacing these parts, be sure to use specified ones to secure the safety.
- The parts not indicated in this Parts List and those which are filled with lines — in the Parts No. columns will not be supplied.
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

TOLERANCES

F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

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■ PRINTED WIRING BOARD PARTS LIST

AV-25TS4EE

● MAIN PW BOARD ASS'Y 36

● CRT SOCKET PW BOARD ASS' Y 40

● FRONT CONTROL PW BOARD ASS'Y 41

● IF PW BOARD ASS'Y 41

● AV SEL & MSP PW BOARD ASS'Y 42

AV-25TS4EN

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● FRONT CONTROL PW BOARD ASS'Y 48

● IF PW BOARD ASS'Y 48

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● MAIN PW BOARD ASS'Y 49

● CRT SOCKET PW BOARD ASS' Y 53

● FRONT CONTROL PW BOARD ASS'Y 53

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■ PACKING 56

■ PACKING PARTS LIST 57

USING PW BOARD & REMOTE CONTROL UNIT

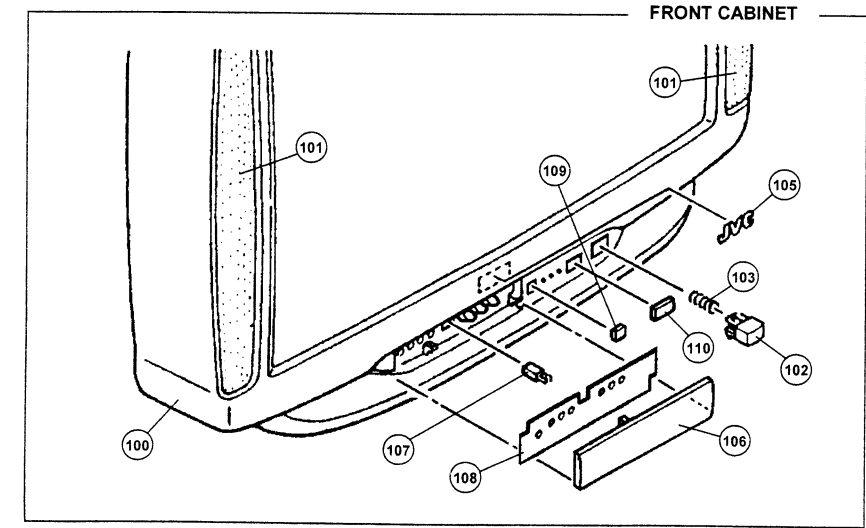
PWB ASS'Y \ Model	AV-25TS4EE	AV-25TS4EN	AV-25TS4EP
MAIN PWB	SJH-1302A-U2	SJH-1002A-U2	SJH-1702A-U2
CRT SOCKET PWB	SJH-3001A-U2	←	←
FRONT CONTROL PWB	SJH-8002A-U2	←	←
IF PWB	SJH0F301A-U2	SJH0F001A-U2	SJH0F701A-U2
AV SEL & MSP PWB	SJH0S001A-U2	←	←
REMOTE CONTROL UNIT	RM-C795-1E	←	←

AV-25TS4EE / AV-25TS4EN / AV-25TS4EP

EXPLODED VIEW PARTS LIST

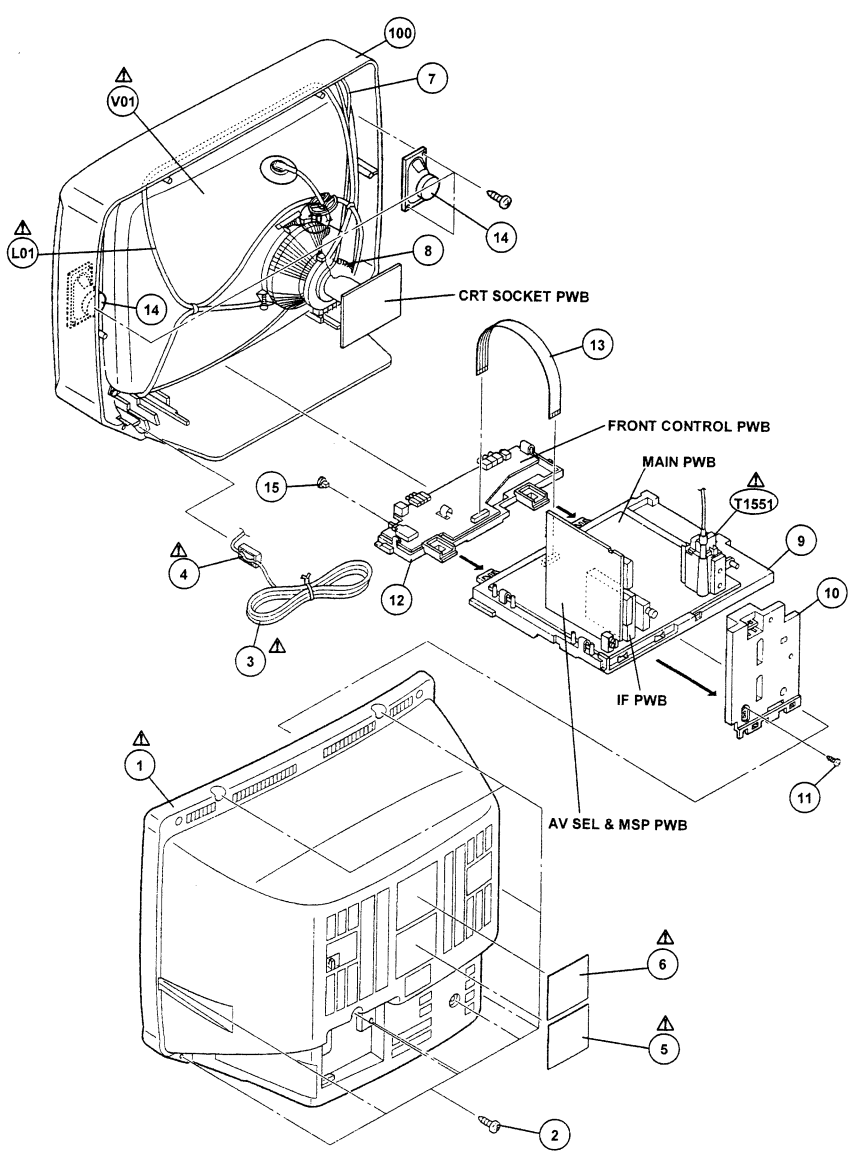
Ref.No.	Part No.	Part Name	Description	Local
△ V01	A59ECF50X05	ITC TUBE(C)	Inc.DY,WED	*
△ L01	CELD019-002J7	DEGAUSSING COIL	(SERVICE)	*
△ T1551	CETH018-00AJ1	H.V. TRANSF.		*
△ 1	CM12771-B01-E	REAR COVER		*
△ 2	GBSA4016N	TAPPING SCREW	(×9)	*
△ 3	AEEMP001-185	POWER CORD		*
△ 4	CM46618-A01-E	POWER CORD CLAMP		*
△ 5	LC20230-002A-U	RATING LABEL	AV-25TS4EE	*
△ 5	LC20076-005A-U	RATING LABEL	For GBR/GER/ITA AV-25TS4EN	*
△ 5	LC20079-004A-U	RATING LABEL	AV-25TS4EP	*
△ 6	LC20078-009A-U	RATING LABEL	For GBR/ESP/FRA AV-25TS4EN	*
△ 7	WJY0001-006A	E-BRAIDED ASSY		*
△ 8	CHG80017-0C-CE	SUB BRAIDED WIRE		*
△ 9	CM12933-B01-E	CHASSIS BASE		*
△ 10	CM12784-005-E	AV TERM BASE		*
△ 11	QYSB5F3012M	TAPPING SCREW		*
△ 12	CM12640-007-E	CONTROL BASE		*
△ 13	CHFD125-08BD	FFC WIRE		*
△ 14	CEB5512D-04KJ2	SPEAKER	(×2)SP01,SP02	*
△ 15	LC40391-001A-C	KNOB CAP		*
△ 100	CM12770-00E-E	FRONT CABINET	Inc.No.101~110	*
△ 101	CM22993-A01-E	PUNCHING METAL	(×2)	*
△ 102	CM36353-A01-E	POWER KNOB		*
△ 103	CM30861-076	SPRING		*
△ 105	CM47783-A01-E	JVC MARK		*
△ 106	CM22994-003-E	DOOR		*
△ 107	CM48229-00A	DOOR LATCH		*
△ 108	CM36354-005-E	CONTROL SHEET		*
△ 109	CM36246-001-H	E.E.WINDOW		*
△ 110	CM36247-A01-H	REMOCON WINDOW		*

EXPLODED VIEW I



AV-25TS4EE / AV-25TS4EN / AV-25TS4EP

EXPLODED VIEW II



AV-25TS4EE

PRINTED WIRING BOARD PARTS LIST

MAIN P.W. BOARD ASS'Y (SJH-1302A-U2)

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1001	QRK126J-474X	C R	470KΩ 1/2W J *	
R1002	NRSA02J-104X	MG R	100KΩ 1/10W J *	
R1003-06	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1101-02	NRSA02J-101X	MG R	100Ω 1/10W J *	
R1103-04	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1105	NRSA02J-562X	MG R	5.6KΩ 1/10W J *	
R1106	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1107	NRSA02J-561X	MG R	560Ω 1/10W J *	
R1108	NRSA02J-105X	MG R	1MΩ 1/10W J *	
R1109	NRSA02J-273X	MG R	27KΩ 1/10W J *	
R1112-14	NRSA02J-101X	MG R	100Ω 1/10W J *	
R1115-18	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1119	NRSA02J-333X	MG R	33KΩ 1/10W J *	
R1120	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1121	NRSA02J-472X	MG R	4.7KΩ 1/10W J *	
R1123	NRSA02J-103X	MG R	10KΩ 1/10W J *	
R1125	NRSA02J-471X	MG R	470Ω 1/10W J *	
R1401-02	NRSA02J-103X	MG R	10KΩ 1/10W J *	
R1403	NRSA02J-682X	MG R	6.8KΩ 1/10W J *	
R1404	NRSA02J-183X	MG R	18KΩ 1/10W J *	
R1405	NRSA02J-223X	MG R	22KΩ 1/10W J *	
R1406	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1407-08	NRSA02J-103X	MG R	10KΩ 1/10W J *	
R1409	NRSA02J-473X	MG R	47KΩ 1/10W J *	
R1411	NRSA02J-0R0X	MG R	0.0Ω 1/10W J *	
R1412	QRK14CF-2202Y	MF R	22KΩ 1/4W F *	
R1413	QRK14CF-1002Y	MF R	10KΩ 1/4W F *	
R1414	NRSA02J-0R0X	MG R	0.0Ω 1/10W J *	
R1415	QRE121J-4F7Y	C R	4.7Ω 1/2W J *	
R1416	QRK01GJ-1R2	MF R	1.2Ω 1W J *	
R1419	QRE121J-1R0Y	C R	1.0Ω 1/2W J *	
R1420	QRK01GJ-1S1	OM R	150Ω 1W J *	
R1461	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1462	NRSA02J-562X	MG R	5.6KΩ 1/10W J *	
R1463-64	NRSA02J-222X	MG R	220Ω 1/10W J *	
R1465	NRSA02J-472X	MG R	4.7KΩ 1/10W J *	
R1466	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1467	QRE121J-101Y	C R	10KΩ 1/2W J *	
R1468	QRK14CF-2481Y	MF R	2.48KΩ 1/4W F *	
R1469-70	NRSA02J-333X	MG R	33KΩ 1/10W J *	
R1471	NRSA02J-222X	MG R	2.2KΩ 1/10W J *	
R1472	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1473	NRSA02J-333X	MG R	33KΩ 1/10W J *	
R1474	NRSA02J-331X	MG R	330Ω 1/10W J *	
R1475	QRK14GJ-3R2X	C R	2.2Ω 1/4W J *	
R1476	QRE121J-103Y	C R	10KΩ 1/2W J *	
R1477	QRE121J-223Y	C R	2.2KΩ 1/2W J *	
R1478	QRE121J-183Y	C R	18KΩ 1/2W J *	
R1479	QRK039J-3R0	OM R	39Ω 3W J *	
R1480-82	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1483	NRSA02J-104X	MG R	100KΩ 1/10W J *	
R1484	NRSA02J-103X	MG R	10KΩ 1/10W J *	
R1485	NRSA02J-563X	MG R	56KΩ 1/10W J *	
R1486	NRSA02J-272X	MG R	2.7KΩ 1/10W J *	
R1501	NRSA02J-681X	MG R	680Ω 1/10W J *	
R1502	NRSA02J-103X	MG R	10KΩ 1/10W J *	
R1503	NRSA02J-104X	MG R	100KΩ 1/10W J *	
R1504	NRSA02J-103X	MG R	10KΩ 1/10W J *	
R1505	NRSA02J-0R0X	MG R	0.0Ω 1/10W J *	
R1506	NRSA02J-222X	MG R	2.2KΩ 1/10W J *	

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1507	QRE121J-152Y	C R	1.5KΩ 1/2W J *	
R1508	QRK029J-3R2	OM R	3.3KΩ 2W J *	
R1509	QRK029J-3R2	OM R	3.3KΩ 2W J *	
R1511	QRE121J-150Y	C R	150Ω 1/2W J *	
R1512	QRK029J-103	OM R	10KΩ 2W J *	
R1523	QRE121J-471Y	C R	470Ω 1/2W J *	
R1525	QRK074K-3R3	UMF R	3.3Ω 7W K *	
R1531	QRE121J-104Y	C R	100KΩ 1/2W J *	
R1532	NRSA02J-123X	MG R	12KΩ 1/10W J *	
R1533	QRE121J-153Y	C R	1.5KΩ 1/2W J *	
△ R1552	QRZ902J-4R7	FUS1 RESISTOR	4.7Ω 0.14W J *	
△ R1553	QRZ902J-1R0	FUS1 RESISTOR	1.0Ω 1W J *	
△ R1554	QRZ902J-1R0	FUS1 RESISTOR	1.0Ω 1W J *	
R1555	NRSA02J-562X	MG R	5.6KΩ 1/10W J *	
R1556	NRSA02J-183X	MG R	18KΩ 1/10W J *	
R1557	NRSA02J-822X	MG R	8.2KΩ 1/10W J *	
R1581	QRE121J-562Y	C R	5.6KΩ 1/2W J *	
R1582	NRSA02J-152X	MG R	1.5KΩ 1/10W J *	
R1583	NRSA02J-183X	MG R	18KΩ 1/10W J *	
R1584	NRSA02J-222X	MG R	2.2KΩ 1/10W J *	
△ R1585	QRK14CF-1582Y	MF R	15.8KΩ 1/4W F *	
△ R1586	QRK14CF-2941Y	MF R	2.94KΩ 1/4W F *	
R1587	NRSA02J-273X	MG R	27KΩ 1/10W J *	
R1601	QRK126J-2R2X	C R	2.2Ω 1/2W J *	
R1603	QRK126J-2R2X	C R	2.2Ω 1/2W J *	
R1604-05	NRSA02J-223X	MG R	22KΩ 1/10W J *	
R1606	NRSA02J-104X	MG R	10KΩ 1/10W J *	
R1607	NRSA02J-682X	MG R	6.8KΩ 1/10W J *	
R1608	NRSA02J-104X	MG R	10KΩ 1/10W J *	
R1609	NRSA02J-473X	MG R	47KΩ 1/10W J *	
R1610	NRSA02J-0R0X	MG R	0.0Ω 1/10W J *	
R1611	NRSA02J-273X	MG R	27KΩ 1/10W J *	
R1613-14	NRSA02J-223X	MG R	22KΩ 1/10W J *	
R1615	NRSA02J-104X	MG R	10KΩ 1/10W J *	
R1616-17	NRSA02J-333X	MG R	33KΩ 1/10W J *	
R1618-19	NRSA02J-682X	MG R	6.8KΩ 1/10W J *	
R1620	NRSA02J-0R0X	MG R	0.0Ω 1/10W J *	
R1621	NRSA02J-561X	MG R	560Ω 1/10W J *	
R1622	NRSA02J-103X	MG R	10KΩ 1/10W J *	
R1633	NRSA02J-473X	MG R	47KΩ 1/10W J *	
R1634	NRSA02J-562X	MG R	5.6KΩ 1/10W J *	
R1635	NRSA02J-681X	MG R	680Ω 1/10W J *	
R1636-37	NRSA02J-103X	MG R	10KΩ 1/10W J *	
R1638	NRSA02J-681X	MG R	680Ω 1/10W J *	
R1639	NRSA02J-473X	MG R	47KΩ 1/10W J *	
R1640	NRSA02J-562X	MG R	5.6KΩ 1/10W J *	
R1641	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1701-02	NRSA02J-682X	MG R	6.8KΩ 1/10W J *	
R1703	NRSA02J-331X	MG R	330Ω 1/10W J *	
R1704	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1705	NRSA02J-103X	MG R	10KΩ 1/10W J *	
R1710	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1712	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1713	NRSA02J-331X	MG R	330Ω 1/10W J *	
R1715-17	NRSA02J-221X	MG R	220Ω 1/10W J *	
R1718-19	NRSA02J-101X	MG R	100Ω 1/10W J *	
R1720	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1721	NRSA02J-392X	MG R	3.9KΩ 1/10W J *	
R1722	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1723	NRSA02J-391X	MG R	3.9KΩ 1/10W J *	

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1724	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1725	NRSA02J-392X	MG R	3.9KΩ 1/10W J *	
R1726	NRSA02J-822X	MG R	8.2KΩ 1/10W J *	
R1727	NRSA02J-472X	MG R	4.7KΩ 1/10W J *	
R1729	NRSA02J-124X	MG R	120KΩ 1/10W J *	
R1730	NRSA02J-683X	MG R	68KΩ 1/10W J *	
R1731	NRSA02J-563X	MG R	56KΩ 1/10W J *	
R1732	NRSA02J-822X	MG R	8.2KΩ 1/10W J *	
R1733-34	NRSA02J-103X	MG R	10KΩ 1/10W J *	
R1735	NRSA02J-223X	MG R	22KΩ 1/10W J *	
R1736	NRSA02J-153X	MG R	15KΩ 1/10W J *	
R1737	NRSA02J-103X	MG R	10KΩ 1/10W J *	
R1738	NRSA02J-274X	MG R	270KΩ 1/10W J *	
R1739	NRSA02J-473X	MG R	4.7KΩ 1/10W J *	
R1740	NRSA02J-821X	MG R	820Ω 1/10W J *	
R1741	NRSA02J-122X	MG R	1.2KΩ 1/10W J *	
R1743	NRSA02J-101X	MG R	100Ω 1/10W J *	
R1744	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1745	NRSA02J-333X	MG R	33KΩ 1/10W J *	
R1747	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1749	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1751-56	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1759	QRK029J-270	OM R	27Ω 0.2W J *	
R1760	NRSA02J-821X	MG R	820Ω 1/10W J *	
R1761	NRSA02J-103X	MG R	10KΩ 1/10W J *	
R1762	NRSA02J-331X	MG R	330Ω 1/10W J *	
R1763	NRSA02J-471X	MG R	470Ω 1/10W J *	
R1764	NRSA02J-472X	MG R	4.7KΩ 1/10W J *	
R1768-73	NRSA02J-472X	MG R	4.7KΩ 1/10W J *	
R1775	NRSA02J-221X	MG R	220Ω 1/10W J *	
R1776	NRSA02J-273X	MG R	27KΩ 1/10W J *	
R1777-78	NRSA02J-103X	MG R	10KΩ 1/10W J *	
R1779	NRSA02J-223X	MG R	22KΩ 1/10W J *	
R1800-81	NRSA02J-103X	MG R	10KΩ 1/10W J *	
R1782	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1783	NRSA02J-103X	MG R	10KΩ 1/10W J *	
R1784-85	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1786-92	NRSA02J-221X	MG R	220Ω 1/10W J *	
R1793	NRSA02J-0R0X	MG R	0.0Ω 1/10W J *	
R1801	NRSA02J-471X	MG R	470Ω 1/10W J *	
R1802-03	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1804	NRSA02J-151X	MG R	1.5KΩ 1/10W J *	
R1805	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1808-10	NRSA02J-333X	MG R	33KΩ 1/10W J *	
R1811	NRSA02J-333X	MG R	3.3KΩ 1/10W J *	
R1812	NRSA02J-822X	MG R	8.2KΩ 1/10W J *	
R1813	NRSA02J-331X	MG R	330Ω 1/10W J *	
R1814	NRSA02J-391X	MG R	390Ω 1/10W J *	
R1815	NRSA02J-122X	MG R	1.2KΩ 1/10W J *	
R1819	NRSA02J-393X	MG R	39KΩ 1/10W J *	
R1820	NRSA02J-102X	MG R	1KΩ 1/10W J *	
R1822	NRSA02J-101X	MG R	1KΩ 1/10W J *	
R1823	NRSA02J-152X	MG R	1.5KΩ 1/10W J *	
R1824	NRSA02J-271X	MG R	270Ω 1/10W J *	
R1825	NRSA02J-152X	MG R	1.5KΩ 1/10W J *	
R1826	NRSA02J-271X	MG R	270Ω 1/10W J *	
R1827	NRSA02J-152X	MG R	1.5KΩ 1/10W J *	
R1828	NRSA02J-271X	MG R	270Ω 1/10W J *	
R1901	QRK104K-3R3	UMF R	3.3Ω 10W K *	
R1902-03	QRE121J-474Y	C R	470KΩ 1/2W J *	
R1904	QRK039J-473	OM R	47KΩ 3W J *	
R1905	QRK039J-333	OM R	33KΩ 3W J *	
R1906	QRE121J-102Y	C R	1KΩ 1/2W J *	
R1907	QRK039J-833	OM R	0.33KΩ 5W J *	
R1910	NRSA02J-161X	MG R	160Ω 1/10W J *	
R1911	QRE121J-470Y	C R	47Ω 1/2W J *	
R1912	NRSA02J-0R0X	MG R	0.0Ω 1/10W J *	

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1915	NRSA02J-102X	MG R	1KΩ 1/10W J	
R1916	NRSA02J-273X	MG R	27KΩ 1/10W J	
R1917	NRSA02J-682X	MG R	6.8KΩ 1/10W J	
R1918	NRSA02J-102X	MG R	1KΩ 1/10W J	
R1919	NRSA02J-562X	MG R	5.6KΩ 1/10W J	
R1919	NRSA02J-332X	MG R	3.3KΩ 1/10W J	
R1920-21	NRSA02J-102X	MG R	1KΩ 1/10W J	
R1922	NRSA02J-224X	MG R	220KΩ 1/10W J	
R1951	QRK074J-102	UMF R	1KΩ 7W J	
R1952	QRK029J-473	OM R	47KΩ 2W J	
R1953	NRSA02J-222X	MG R	2.2KΩ 1/10W J	
R1954	NRSA02J-473X	MG R	47KΩ 1/10W J	
R1955	NRSA02J-103X	MG R	10KΩ 1/10W J	
R1956	QRK039J-R82	MF R	22Ω 1/10W J	
R1958	NRSA02J-220X	MG R	22Ω 1/10W J	
R1959	NRSA02J-822X	MG R	8.2KΩ 1/10W J	
R1960	NRSA02J-470X	MG R	47Ω 1/10W J	
R1961	NRSA02J-562X	MG R	5.6KΩ 1/10W J	
R1963	NRSA02J-183X	MG R	18KΩ 1/10W J	
R1964	QRG01GJ-120	OM R	12Ω 1W J	
R1966	QRG029J-380	OM R	18 Ω 2W J	
R1967	QRG029J-223	OM R	22KΩ 2W J	
R1968	QRG029J-270	OM R	27 Ω 2W J	
R1969	QRG01GJ-121	OM R	120Ω 1W J	
△ R1991	QRZ0057-835	C R	8.2MΩ 1W J	
CAPACITOR				
C1001	QETN1HM-106Z	E CAP.	10μF 50V M	
C1002	NCB21HK-222X	C CAP.	2200pF 50V K	
C1003	QETN1CM-106Z	E CAP.	1000μF 16V M	
C1004	QETN1HM-106Z	E CAP.	10μF 50V M	
C1005	NCB21HK-104X	CHTP CAP.	0.1μF 50V K	
C1006	QETN1CM-107Z	E CAP.	1000μF 16V M	
C1007-09	NCB21HK-104X	CHTP CAP.	0.1μF 50V K	
C1010	QETN1CM-106Z	E CAP.	1000μF 16V M	
C1011	NCB21HK-103X	C CAP.	0.01μF 50V K	
C1012-03	NCB21HK-104X	CHTP CAP.	0.1μF 50V K	
C1014	NCB21HK-623X	CHTP CAP.	0.02μF 50V K	
C1015	QETN1HK-475Z	E CAP.	4.7μF 50V M	
C1017-06	NCB21HK-103X	C CAP.	0.01μF 50V K	
C1018	QETN1CM-106Z	E CAP.	1000μF 16V M	
C1110	NDG21HK-120X	C CAP.	12μF 50V M	
C1111	QETN1HK-106Z	E CAP.	10μF 50V M	
C1112	NCB21HK-103X	C CAP.	0.01μF 50V K	
C1113-15	NCB21HK-104X	CHTP CAP.	0.1μF 50V K	
C1116	QETN1HM-105Z	E CAP.	1μF 50V M	
C1117	NCB21HK-103X	C CAP.	0.01μF 50V K	
C1118-26	QETN1HK-105Z	E CAP.	1μF 50V M	
C1121	QETN1HM-475Z	E CAP.	4.7μF 50V M	
C1122	QETN1CM-107Z	E CAP.	1000μF 16V M	
C1123	NCB21HK-104X	CHTP CAP.	0.1μF 50V K	
C1124	QETN1HK-106Z	E CAP.	10μF 50V M	
C1125	QETN1HK-105Z	E CAP.	1μF 50V M	
C1126	QETN1CM-476Z	E CAP.	47μF 16V M	
C1127	NCB21HK-103X	C CAP.	0.01μF 50V K	
C1128	NDG21HK-390X	C CAP.	39μF 50V M	
C1129	NDG21HK-580V	C CAP.	68μF 50V M	
C1401	QETN1HK-105Z	E CAP.	1μF 50V M	
C1407	QETN1VM-227Z	E CAP.	220μF 35V M	
C1408	QETN1HK-107Z	E CAP.	100μF 16V M	
C1409	NDG21HK-152X	C CAP.	1500pF 50V J	
C1410	QETN1VM-108	E CAP.	1000μF 35V M	
C1412	NCB21HK-104X	CHTP CAP.	0.1μF 50V K	
C1413	QETN137-180Z	C CAP.	180pF 50V J	
C1416	NCB21HK-103X	C CAP.	1500pF 50V J	
C1417	QETN134-152Z	M CAP.	0.05μF 100V J	

Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C1418	QFV71HJ-154Z	MF CAP.	0.15uF 50V J *	
C1424	NCB21HJ-680X	C CAP.	68pF 50V J *	
C1428	QFC22AK-104Z	M CAP.	0.1uF 100V K *	
C1461	QFC11HJ-823Z	M CAP.	0.082uF 50V J *	
C1462	QFV71HJ-154Z	MF CAP.	0.15uF 50V J *	
C1463	QEM1EM-222Z	E CAP.	2.2uF 25V K *	
C1464	QFP31HG-33Z	PP CAP.	0.033uF 50V G *	
C1468	NCB21HK-104X	CHIP CAP.	0.1uF 50V K *	
C1469	NC521HJ-121X	C CAP.	120pF 50V J *	
C1470	NCB21HJ-331X	C CAP.	330pF 50V J *	
C1471	QETM1CM-228	E CAP.	2200pF 16V M *	
C1472	NCB21HK-103X	C CAP.	0.01uF 50V K *	
C1473	QEM1HK-475Z	E CAP.	4.7uF 50V K *	
C1474	NCB21HK-103X	C CAP.	0.01uF 50V K *	
C1481	QEH1HM-106Z	E CAP.	10uF 50V M *	
C1501	QETN1CM-107Z	E CAP.	100uF 16V M *	
C1502-04	NCB21HK-103X	C CAP.	0.01uF 50V K *	
C1505	NCB21HK-822X	C CAP.	8200pF 50V K *	
C1506	QETN1HM-105Z	E CAP.	1uF 50V M *	
C1507	NCB21HK-103X	C CAP.	0.01uF 50V K *	
C1509	QCB32HK-681Z	C CAP.	680pF 500V K *	
C1510	QEH2CM-105Z	E CAP.	1uF 160V M *	
Δ C1521	QFZ0122-36Z	MPP CAP.	3.6kΩ 8kVH ±3%	
Δ C1522	QFZ0152-8001	MPP CAP.	8000pF 1.5kVH ±2.5%	
Δ C1523	QFP32GJ-333	PP CAP.	0.033uF 400V J *	
Δ C1524	QFZ0119-474	MPP CAP.	0.47uF 200V ±3%	
Δ C1525	QFZ0194-304	MPP CAP.	0.3uF 250V J *	
C1526	QEM2HK-475Z	E CAP.	4.7uF 250V M *	
C1527	QCB32HK-561Z	C CAP.	560pF 500V K *	
C1528	QETM2CM-22Z	E CAP.	220uF 160V M *	
Δ C1531	QFZ0119-204	MPP CAP.	0.2uF 200V ±3%	
Δ C1532-53	QEB1EM-108	E CAP.	1000pF 25V M *	
C1554	QETN2EM-106Z	E CAP.	10uF 250V M *	
C1555	NCB21HK-104X	CHIP CAP.	0.1uF 50V K *	
C1581	QETN1AM-107Z	E CAP.	100uF 10V M *	
C1582	QETN1CM-476Z	E CAP.	47uF 16V M *	
C1583	QETN2AM-106Z	E CAP.	10uF 100V M *	
C1584	QETN1AM-227Z	E CAP.	220uF 10V M *	
C1602-03	QETN1HM-105Z	E CAP.	1uF 50V M *	
C1604	QETN1HM-107Z	E CAP.	100uF 50V M *	
C1605	QETN1HM-106Z	E CAP.	10uF 50V M *	
C1606-09	NCF21HJ-234X	C CAP.	0.22uF 50V Z *	
C1610	QETN1VM-108	E CAP.	1000uF 35V M *	
C1612	QETM1VM-108	E CAP.	1000uF 35V M *	
C1615	QETN1CM-227Z	E CAP.	220uF 16V M *	
C1616	QETM1HM-228	E CAP.	2200uF 50V M *	
C1620	NCB21HK-104X	CHIP CAP.	0.1uF 50V K *	
C1630	QETN1CM-227Z	E CAP.	220uF 16V M *	
C1631	NCB21HK-104X	CHIP CAP.	0.1uF 50V K *	
C1633	NCB21HK-104X	CHIP CAP.	0.1uF 50V K *	
C1636-37	NCF21CZ-105X	C CAP.	1uF 16V Z *	
C1638-39	NCB21HK-103X	C CAP.	0.01uF 50V K *	
C1701	QETN1EM-108Z	E CAP.	1000uF 25V M *	
C1702	NCB21HK-104X	CHIP CAP.	0.1uF 50V K *	
C1703	QETN1HM-106Z	E CAP.	10uF 50V M *	
C1704	QETN1AM-227Z	E CAP.	220uF 10V M *	
C1705	NCB21HK-104X	CHIP CAP.	0.1uF 50V K *	
C1707	QETN1HM-105Z	E CAP.	1uF 50V M *	
C1709	NCB21HJ-680X	C CAP.	68pF 50V J *	
C1711	NCB21HK-104X	CHIP CAP.	0.1uF 50V K *	
C1712	QETN1AM-107Z	E CAP.	100uF 10V M *	
C1713	NCB21HJ-220X	C CAP.	220pF 50V J *	
C1714	NC521HJ-471X	C CAP.	470pF 50V J *	
C1715	NCB21HK-333X	C CAP.	0.033uF 50V K *	
C1716	NCB21HK-104X	CHIP CAP.	0.1uF 50V K *	
C1718	NCB21HJ-560X	C CAP.	56pF 50V J *	
C1719	NCB21HK-102X	C CAP.	1000pF 50V K *	

Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C1720	QENC1HM-105Z	BP E CAP.	1uF 50V M *	
C1721	NCB21HK-104X	CHIP CAP.	0.1uF 50V K *	
C1730	NCF21CZ-105X	C CAP.	1uF 16V Z *	
C1731	NCB21HJ-821X	C CAP.	820pF 50V J *	
C1807	QETN1CM-476Z	E CAP.	47uF 16V M *	
C1809	QETN1HM-106Z	E CAP.	10uF 50V M *	
C1811	QETN1HM-106Z	E CAP.	10uF 50V M *	
C1812	QETN1CM-107Z	E CAP.	100uF 16V M *	
C1813	QETN1HM-106Z	E CAP.	10uF 50V M *	
C1814	NCB21HK-103X	C CAP.	0.01uF 50V K *	
C1815	NCB21HK-104X	CHIP CAP.	0.1uF 50V K *	
C1816	QETN1HM-226Z	E CAP.	22uF 50V M *	
C1817	NCB21HK-103X	C CAP.	0.01uF 50V K *	
C1818	NCB21HK-223X	C CAP.	0.022uF 50V K *	
C1819	NCB21HJ-221X	C CAP.	220pF 50V J *	
C1820-21	NCB21HJ-150X	C CAP.	15pF 50V J *	
C1822	NCB21HK-104X	CHIP CAP.	0.1uF 50V K *	
C1823-24	NCB21HK-102X	C CAP.	1000pF 50V K *	
C1825	NCB21HJ-221X	C CAP.	220pF 50V J *	
C1826	NCB21HK-104X	CHIP CAP.	0.1uF 50V K *	
C1827	QETN1CM-477Z	E CAP.	470uF 6.3V M *	
C1828-29	NCB21HK-104X	CHIP CAP.	0.1uF 50V K *	
Δ C1901	QCZ9054-47Z	C CAP.	4700pF AC250V Z *	
Δ C1902	QCZ9054-47Z	C CAP.	4700pF AC250V Z *	
Δ C1903	QCZ9054-47Z	C CAP.	4700pF AC250V Z *	
C1904	QEZ0199-22Z	E CAP.	220uF 400V M *	
C1905	QCB32HK-103	C CAP.	0.01uF 500V K *	
C1906	QCZ0122-391	C CAP.	390pF 2000V K *	
C1908	QCZ0122-221	C CAP.	220pF 2000V K *	
C1909	QCZ0122-391	C CAP.	390pF 2000V K *	
C1911	NCB21HK-104X	CHIP CAP.	0.1uF 50V K *	
C1912	QETN1EM-107Z	E CAP.	100uF 25V M *	
C1913	NCB21HK-102X	C CAP.	1000pF 50V K *	
C1914	NC521HJ-101X	C CAP.	100pF 50V J *	
C1915	NCB21HJ-821X	C CAP.	820pF 50V J *	
C1916	QETN1HM-105Z	E CAP.	1uF 50V M *	
C1917	NCB21HK-102X	C CAP.	100pF 50V K *	
C1951	QCZ0131-561	C CAP.	390pF 2000V K *	
C1952-53	QCZ0132-102Z	C CAP.	1000pF 500V K *	
C1954	QCZ0135-101Z	C CAP.	100pF 1000V K *	
C1955	NCB21HK-104X	CHIP CAP.	0.1uF 50V K *	
C1956	QEZ0202-22Z	E CAP.	220uF 160V M *	
C1957	QEZ0257-228	E CAP.	220uF 25V M *	
C1959	QEH1EM-108Z	E CAP.	1000uF 35V M *	
C1962	QEH1CM-477Z	E CAP.	470uF 16V M *	
C1965	QEB1VM-108	E CAP.	1000uF 35V M *	
C1966	NCB21HK-473X	C CAP.	0.047uF 50V K *	
C1972	QFV71HJ-684Z	MF CAP.	0.68uF 50V J *	
C1973	QCB32HK-392Z	C CAP.	3900pF 500V K *	
C1974-75	NCB21HK-104X	CHIP CAP.	0.1uF 50V K *	
C1976	QETN1CM-227Z	E CAP.	220uF 16V M *	
C1977	NCB21HK-104X	CHIP CAP.	0.1uF 50V K *	
C1978	QEH1CM-227Z	E CAP.	220uF 16V M *	
C1979	NCB21HK-104X	CHIP CAP.	0.1uF 50V K *	
C1980	QEH1AM-227Z	E CAP.	220uF 10V M *	
C1981	QETN1CM-227Z	E CAP.	220uF 16V M *	
Δ C1992	QCZ9079-471	C CAP.	470pF AC250V K *	
Δ C1993	QCZ9079-33Z	C CAP.	3300pF AC250V K *	
Δ C1994	NCB21HK-103X	C CAP.	0.01uF 50V K *	
TRANSFORMER				
T1501	CE42034-00Z	H.DRIVE TRANSF.		
T1521	CE42549-001J1	BRIDGE COIL		
Δ T1901	CET5121-001JC	SW TRANSF.		

Symbol No.	Part No.	Part Name	Description	Local
COIL				
L1001	QQL01BK-270Z	COIL	27uH *	
L1003-04	QQL01BK-8R2Z	COIL	8.2uH *	
L1006	QQL01BK-5R6Z	COIL	5.6uH *	
L1010	QQL01BK-5R6Z	COIL	5.6uH *	
L1101	QQL01BK-221Z	COIL	220uH *	
L1102	QQL01BK-4R7Z	COIL	4.7uH *	
L1103	QQL01BK-330Z	COIL	33uH *	
L1461	CE42567-001J1	INJECTION COIL		
L1521	CELL01Z-001J2	LINEARITY COIL		
L1551	QQL2018-800	HEATER CHOKE		
L1701	QQL01BK-8R2Z	COIL	8.2uH *	
L1702	QQL01BK-221Z	COIL	220uH *	
L1801	QQL01BK-3R3Z	COIL	3.3uH *	
L1802	QQL01BK-4R7Z	COIL	4.7uH *	
L1901	QQL26AM-2R7Z	CHOKE COIL		
L1951	QQL2018-460	HEATER CHOKE		
L1954	QQL26AK-220Z	COIL	22uH *	
L1958	QQL26AM-5R6Z	CHOKE COIL		
L1960-61	QQL26AM-5R6Z	CHOKE COIL		
DIODE				
D1101	MA111-X	SI DIODE		
D1402	1N4003-T2	SI DIODE		
D1461	MA3039/H/-X	ZENER DIODE		
D1462	MA3120/H/-X	ZENER DIODE		
D1463-64	MA3220/H/-X	ZENER DIODE		
D1481	MA111-X	SI DIODE		
D1482	MA3220/H/-X	ZENER DIODE		
D1501	MA3051/M/-X	ZENER DIODE		
D1521	BY228-20	SI DIODE		
D1522	BYW55B-20	SI DIODE		
D1523	BYD336-T3	SI DIODE		
D1551-52	BYW55B-20	SI DIODE		
D1553-54	BYD336-T3	SI DIODE		
D1555	BYD330-T3	SI DIODE		
D1581	MA3150/M/-X	ZENER DIODE		
D1582	MA3075/M/-X	CHIP ZENER DIODE		
D1583	BYD330-T3	SI DIODE		
D1584	MTZ17 55-T2	ZENER DIODE		
D1601-02	MA3150/L/-X	ZENER DIODE		
D1604	MA1534-X	SI DIODE		
D1605	MA111-X	SI DIODE		
D1606	MA1534-X	SI DIODE		
D1608	MA111-X	SI DIODE		
D1609	MA152M-X	SI DIODE		
D1613	MA111-X	SI DIODE		
D1615	MA111-X	SI DIODE		
D1701-02	MA7004-X	SI DIODE		
D1708-11	MA111-X	SI DIODE		
D1715	MA111-X	SI DIODE		
D1716	MA3068/H/-X	ZENER DIODE		
D1801-02	MA111-X	SI DIODE		
Δ D1901	D35BAG0	DIODE BRIDGE		
D1902	BYD33M-T3	SI DIODE		
D1903	BYD330-T3	SI DIODE		
D1951	R048-F1	SI DIODE		
D1952-53	BYD33M-T3	SI DIODE		
D1954	MC822-6	THYRISTOR		
D1955	1SR35-400A-T2	SI DIODE		
D1956	BYD330-T3	SI DIODE		
D1957-58	BYW55B-20	SI DIODE		
D1959	SF6L200	SI DIODE		
D1962	MTZ158-T2	ZENER DIODE		
D1964	MA3150/M/-X	ZENER DIODE		
D1965	MA3075/H/-X	ZENER DIODE		
D1966	MA3330/L/-X	ZENER DIODE		

Δ Symbol No.	Part No.	Part Name	Description
DIODE			
D1967	MA3051/M/-X	ZENER DIODE	
D1980-82	MA111-X	SI DIODE	
D1983	MTZ128-T2	ZENER DIODE	
D1984	1SR35-400A-T2	SI DIODE	
TRANSISTOR			
Q1101	2SA116Z/YG/-X	SI TRANSISTOR	
Q1103	DTC144KA-X	DIGI. TRANSISTOR	
Q1461-64	2SC2712/YG/-X	SI TRANSISTOR	
Q1465	2SD1408/YO/-LB	SI TRANSISTOR	
Q1481-82	2SC2712/YG/-X	SI TRANSISTOR	
Q1501	BSN274	F. E. T.	
Δ Q1521	BUZ508AX	POWER TRANSISTOR	H. OUT
Q1531	2SK455N-F54	POWER MOS FET	
Q1532	DTC124KA-X	DIGI. TRANSISTOR	
Q1581	2SA949/Y/Z1	SI TRANSISTOR	
Q1582	DTC124KA-X	DIGI. TRANSISTOR	
Q1583	2SC2712/YG/-X	SI TRANSISTOR	
Q1601	2SC2712/YG/-X	SI TRANSISTOR	
Q1602	2SA116Z/YG/-X	SI TRANSISTOR	
Q1603-04	DTC323TK-X	DIGI. TRANSISTOR	
Q1605-06	2SA116Z/YG/-X	SI TRANSISTOR	
Q1607-08	DTC323TK-X	DIGI. TRANSISTOR	
Q1610-11	2SA116Z/YG/-X	SI TRANSISTOR	
Q1701-06	2SC2712/YG/-X	SI TRANSISTOR	
Q1707	2SA116Z/YG/-X	SI TRANSISTOR	
Q1801	2SA116Z/YG/-X	SI TRANSISTOR	
Q1802	DTC124KA-X	DIGI. TRANSISTOR	
Q1806-07	2SC2712/YG/-X	SI TRANSISTOR	
Q1901	MTA9N06	F. E. T.	
Q1951	2SC2712/YG/-X	SI TRANSISTOR	
Q1952-53	DTC124KA-X	DIGI. TRANSISTOR	
IC			
IC1101	T81227AN	1. C. (DIGI-OTHER)	
IC1401	LA7841	1. C. (MONO-ANA)	
IC1461	TAB893CP	1. C. (MONO-ANA)	
IC1602	TAB246H	F. C.	
IC1701	M3720TMF-1555P	1. C. (MICRO-COMP)	
IC1702	L78LRO5E-MA	1. C. (MONO-ANA)	
IC1703	AT24C1625T54EN	1. C.	
IC1802	TC4053BP/M/	1. C.	(SERVICE)
IC1804	CF70211	1. C. (DIGI-MOS)	
IC1805	CF72417	1. C. (DIGI-MOS)	
IC1901	MC44640P	1. C. (MONO-ANA)	
IC1951	BA127	1. C.	
IC1952	AN7800F	1. C. (MONO-ANA)	
IC1953	AN7805F	1. C. (MONO-ANA)	
IC1954	SE135N	1. C. (HYBRID)	
OTHERS			
CW1006	CM48279-001-E	SHIELD PLATE	
Δ CP1951	IC4108A-25T-AE	FFC CONNECTOR	
Δ CP1952	ICP-N50-Y	1. C. PROTECT	
Δ CP1955	ICP-N50-Y	1. C. PROTECT	
J1001	ICP-N38-Y	1. C. PROTECT	
K1001	QW0296-001	PIN JACK	
K1002-03	CE41433-001Z	BEADS CORE	
	CE42681-001Y	BEADS CORE	
K1005	CE41433-001Z	BEADS CORE	
K1402	CE41433-001Z	BEADS CORE	
K1403	CE42681-001Y	BEADS CORE	
K1601-07	CE42681-001Y	BEADS CORE	

Symbol No.	Part No.	Part Name	Description	Local
OTHERS				
K1901	QQR0872-001Y	FERRITE BEADS		*
K1903	QQR0872-001Y	FERRITE BEADS		*
K1951	QQR0872-001Y	FERRITE BEADS		*
K1953-55	CE41433-001Z	BEADS CORE		*
PC1531	TL9621(B)	I.C. (PH. COUPLER)		*
PC1901	TL9721F (04-GR)	I.C. (PH. COUPLER)		*
TU1001	CEK461-B04	TUNER		*
X1101	QAX0305-001Z	CRYSTAL		*
X1701	CST8.00MTW	CER. RESONATOR		*
X1801	CE41257-001Z	CRYSTAL		*
Y1463	NRSA02J-OROX	MG R	0.00 1/10W J	*
Y1603	NRSA02J-OROX	MG R	0.00 1/10W J	*
Y1605-07	NRSA02J-OROX	MG R	0.00 1/10W J	*
Y1801	NRSA02J-OROX	MG R	0.00 1/10W J	*
Y1955	NRSA02J-OROX	MG R	0.00 1/10W J	*
Y1957	NRSA02J-OROX	MG R	0.00 1/10W J	*

CRT SOCKET P.W. BOARD ASS'Y (SJH-3001A-U2)

Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R3101-06	NRSA02J-101X	MG R	100Ω 1/10W J	*
R3107	QRE121J-181Y	C R	180Ω 1/2W J	*
R3108	NRSA02J-470X	MG R	47Ω 1/10W J	*
R3109	QRE121J-181Y	C R	180Ω 1/2W J	*
R3110-11	NRSA02J-470X	MG R	47Ω 1/10W J	*
R3112	QRE121J-181Y	C R	180Ω 1/2W J	*
R3113-17	QRL029J-153	OM R	15KΩ 2W J	*
R3118-20	QRL029J-153	C R	1.0KΩ 1/2W K	*
R3121	NRSA02J-102X	MG R	1KΩ 1/10W J	*
R3122	NRSA02J-472X	MG R	4.7KΩ 1/10W J	*
R3124	QRL029J-153	OM R	15KΩ 2W J	*
R3125	QRE121J-474Y	C R	470KΩ 1/2W J	*
R3126	QRL016J-101	OM R	100Ω 1W J	*
R3131	QRL0107-474Z	C R	470KΩ 1/2W K	*
R3141-43	NRSA02J-222X	MG R	2.2KΩ 1/10W J	*
R3165	NRSA02J-OROX	MG R	0.00 1/10W J	*

CAPACITOR

C3101-02	NDC21HJ-271X	C CAP.	270pF 50V J	*
C3103	NCB21HK-331X	C CAP.	330pF 50V K	*
C3104	QETN1CM-107Z	E CAP.	100pF 16V M	*
C3105	QETN1CM-475Z	E CAP.	47pF 16V M	*
C3106	WCF21E2-104X	C CAP.	0.1μF 25V Z	*
C3113	QCZ0121-10Z	C CAP.	1000pF 3000V Z	*
C3121	QETN1HM-106Z	E CAP.	10μF 50V M	*
C3123	QETM2EM-336	E CAP.	33μF 250V M	*

COIL

L3101-03	QQL01BK-181Z	COIL	180μH	*
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DIODE

D3121	DAN202X-X	DIODE ARRAY		*
D3123	MA3068/M-X	ZENER DIODE		*
D3124-26	DAN202X-X	DIODE ARRAY		*

TRANSISTOR

Q3101-03	25C1815/YG/-T	SI TRANSISTOR		*
Q3104-06	25C4544-LB	SI TRANSISTOR		*
Q3153	25C1815/YG/-T	SI TRANSISTOR		*
Q3154	25A1162/YG/-X	SI TRANSISTOR		*

OTHERS

K3001	CE41433-001Z	BEADS CORE		*
SK3001	CE42446-001	C.R.T. SOCKET		*
W3003	NRSA02J-OROX	MG R	0.00 1/10W J	*
W3005	NRSA02J-OROX	MG R	0.00 1/10W J	*
W3010	NRSA02J-OROX	MG R	0.00 1/10W J	*
Y3107	NRSA02J-OROX	MG R	0.00 1/10W J	*
Y3111-12	NRSA02J-OROX	MG R	0.00 1/10W J	*

FRONT CONTROL P.W. BOARD ASS'Y (SJH-8002A-U2)

Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R8001-02	QRE121J-271Y	C R	270Ω 1/2W J	*
R8003	NRSA02J-222X	MG R	2.2KΩ 1/10W J	*
R8004	NRSA02J-472X	MG R	4.7KΩ 1/10W J	*
R8005-06	NRSA02J-561X	MG R	560Ω 1/10W J	*
R8008	NRSA02J-682X	MG R	6.8KΩ 1/10W J	*
R8009	NRSA02J-105X	MG R	10KΩ 1/10W J	*
R8010	NRSA02J-183X	MG R	18KΩ 1/10W J	*
R8011	NRSA02J-123X	MG R	12KΩ 1/10W J	*
R8012	NRSA02J-273X	MG R	27KΩ 1/10W J	*
R8013	NRSA02J-332X	MG R	3.3KΩ 1/10W J	*
R8014	NRSA02J-123X	MG R	12KΩ 1/10W J	*
R8015-16	NRSA02J-102X	MG R	1KΩ 1/10W J	*
R8017	NRSA02J-750X	MG R	75Ω 1/10W J	*
R8020	NRSA02J-562X	MG R	5.6KΩ 1/10W J	*
R8901	QRE121J-331Y	C R	330Ω 1/2W J	*

CAPACITOR

C8001-02	NCB21HK-222X	C CAP.	2200pF 50V K	*
C8003	QETN1HM-106Z	E CAP.	10μF 50V M	*
C8004	WCF21E2-104X	C CAP.	0.1μF 25V Z	*
C8005	QETN1CM-107Z	E CAP.	100pF 16V M	*
C8006	NDC21HJ-151X	C CAP.	150pF 50V J	*
C8007	WCF21E2-105X	C CAP.	1μF 16V Z	*
C8010-11	NCB21HK-472X	C CAP.	4700pF 50V K	*
C8901	QFZ9040-474	MF CAP.	0.47μFAC275V M	*
C8904	QFZ9040-473	MF CAP.	0.047μFAC275V M	*

COIL

L8001	QQR0716-001Z	LEAD CORE		*
L8002-03	QQL211X-5R6Y	COIL	5.6μH	*
L8010-11	QQL211X-270Y	COIL	27μH	*
L8012	QQR0716-001Z	LEAD CORE		*
L8901-02	QQL401X-100Z	CHOKO COIL		*

DIODE

D8007	P1241-04	C.D.S.		*
D8008	DAN202X-X	DIODE ARRAY		*
D8009	SLR-342M3F	L.E.D. (GRN)		*
D8010	SPR-39MWVF	L.E.D.		*
D8012	SLR-342U3F	L.E.D. (ORG)		*
D8013	MA3068/M-X	ZENER DIODE		*
D8015	DAN202X-X	DIODE ARRAY		*

TRANSISTOR

Q8001	25A1162/YG/-X	SI TRANSISTOR		*
Q8002-03	DTA144TKA-X	DIGI. TRANSISTOR		*

IC

IC8001	GP1U281Q	IFR DETECT UNIT		*
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OTHERS

CN8006	CEM002-001Z	FUSE CLIP		*
F8901	CM36156-A01-E	L.E.D. HOLDER		*
J8001	CHC108N-25T-AE	FFC CONNECTOR		*
J8002	QMS102-3R15J1	FUSE	3.15A	*
J8003	QMS3004-C01	HEADPHONE JACK		*
J8004	QNN0279-003	PIN JACK		*
	QNN0279-002	PIN JACK		*
	QNN0279-001	PIN JACK		*

Symbol No.	Part No.	Part Name	Description	Local
OTHERS				
LF8901	CE42144-001J2	LINE FILTER		*
S8001	QSP1A11-C18Z	PUSH SWITCH	VR	*
S8002	QSP1A11-C18Z	PUSH SWITCH	7(DOWN)	*
S8003	QSP1A11-C18Z	PUSH SWITCH	Δ(UP)	*
TH8901	QSM0750-001	PUSH SWITCH	MAIN POWER	*
	CEK0111-001J2	W.P. THERMISTOR		*

IF P.W. BOARD ASS'Y (SJH0F301A-U2)

Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R0003	NRSA02J-332X	MG R	3.3KΩ 1/10W J	*
R0004	NRSA02J-272X	MG R	2.7KΩ 1/10W J	*
R0005-06	NRSA02J-104X	MG R	100KΩ 1/10W J	*
R0007	NRSA02J-273X	MG R	27KΩ 1/10W J	*
R0008	NRSA02J-151X	MG R	150Ω 1/10W J	*
R0009	NRSA02J-224X	MG R	220KΩ 1/10W J	*
R0011	NRSA02J-103X	MG R	10KΩ 1/10W J	*
R0012	NRSA02J-102X	MG R	1KΩ 1/10W J	*
R0013	NRSA02J-393X	MG R	39KΩ 1/10W J	*
R0014	NRSA02J-124X	MG R	120KΩ 1/10W J	*
R0015	NRSA02J-104X	MG R	100KΩ 1/10W J	*
R0020	NRSA02J-472X	MG R	4.7KΩ 1/10W J	*
R0021	NRSA02J-122X	MG R	1.2KΩ 1/10W J	*
R0022	NRSA02J-331X	MG R	330Ω 1/10W J	*
R0023	NRSA02J-101X	MG R	100Ω 1/10W J	*
R0024	NRSA02J-OROX	MG R	0.00 1/10W J	*
R0025	NRSA02J-222X	MG R	2.2KΩ 1/10W J	*
R0026	NRSA02J-122X	MG R	1.2KΩ 1/10W J	*
R0030-31	NRSA02J-150X	MG R	15Ω 1/10W J	*
R0032	NRSA02J-472X	MG R	4.7KΩ 1/10W J	*
R0033	NRSA02J-122X	MG R	1.2KΩ 1/10W J	*
R0034	NRSA02J-391X	MG R	390Ω 1/10W J	*
R0035	NRSA02J-101X	MG R	100Ω 1/10W J	*
R0036	NRSA02J-OROX	MG R	0.00 1/10W J	*
R0037	NRSA02J-102X	MG R	1KΩ 1/10W J	*
R0104	NRSA02J-OROX	MG R	0.00 1/10W J	*
R0105	NRSA02J-102X	MG R	1KΩ 1/10W J	*
R0107-08	NRSA02J-102X	MG R	1KΩ 1/10W J	*
R0109	NRSA02J-221X	MG R	220Ω 1/10W J	*
R0110	NRSA02J-222X	MG R	2.2KΩ 1/10W J	*
R0111-12	NRSA02J-151X	MG R	150Ω 1/10W J	*
R0113	NRSA02J-331X	MG R	330Ω 1/10W J	*
R0114	NRSA02J-561X	MG R	560Ω 1/10W J	*
R0115	NRSA02J-222X	MG R	2.2KΩ 1/10W J	*
R0116	NRSA02J-561X	MG R	560Ω 1/10W J	*
R0124	NRSA02J-103X	MG R	10KΩ 1/10W J	*

CAPACITOR

C0002	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C0003	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C0004	NCB21EK-104X	C CAP.	0.1μF 25V K	*
C0005-06	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C0007	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C0009	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C0010-11	QETN1CM-476Z	E CAP.	47μF 16V M	*

Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C0012	NCB21HK-103X	C CAP.	0.01uF 50V K	*
C0020	NCB21HK-472X	C CAP.	4700pF 50V K	*
C0022-23	NCB21HK-472X	C CAP.	4700pF 50V K	*
C0025	NCB21HK-472X	C CAP.	4700pF 50V K	*
C0030	NCB21HK-472X	C CAP.	4700pF 50V K	*
C0032	NCB21HK-103X	C CAP.	0.01uF 50V K	*
C0047	QETN1CM-2272	E CAP.	220uF 16V M	*
C0101	QETN1CM-4762	E CAP.	47uF 16V M	*
C0104	NDC21HJ-271X	C CAP.	270pF 50V J	*
C0105	NCF21EZ-104X	C CAP.	0.1uF 25V Z	*
C0110	NCB21HK-103X	C CAP.	0.01uF 50V K	*
C0111	QETN1CM-4762	E CAP.	47uF 16V M	*
TRANSFORMER				
T0001	CEL T001-307	C. WAVE TRANSF.		*
T0020	QOR0626-001	I. F. TRANSF.		*
COIL				
L0020	QLL2014-R47	PEAKING COIL	0.47uH	*
L0021	QLL01BK-1R52	COIL	1.5uH	*
L0041	QLL01BK-1002	COIL	10uH	*
L0103	QLL01BK-1002	COIL	10uH	*
L0104	QLL01BK-5R62	COIL	5.6uH	*
TRANSISTOR				
Q0001	2SA1162/YG/-X	SI. TRANSISTOR		*
Q0002-03	2SC2712/YG/-X	SI. TRANSISTOR		*
Q0012	2SC5083/L/P/-T	SI. TRANSISTOR		*
Q0104	2SC2712/YG/-X	SI. TRANSISTOR		*
Q0106	2SC2712/YG/-X	SI. TRANSISTOR		*
Q0107	2SA1162/YG/-X	SI. TRANSISTOR		*
Q0109-10	2SC2712/YG/-X	SI. TRANSISTOR		*
Q0112-13	DTL144EKA-X	DIGI. TRANSISTOR		*
Q0124	DTL144EKA-X	DIGI. TRANSISTOR		*
IC				
IC0010	MS2760SP	I C		*
OTHERS				
CF0010-11	FTP40.40MF	CERAMIC FILTER		*
CF0100	TP55.5MW	CERAMIC FILTER		*
SF0010	QAX0531-001	SAW FILTER		*
SF0012	QAX0532-003	SAW FILTER		*
W0011-14	NRS402J-OROX	MG R	0.00 1/10W J	*
W0025	NRS402J-OROX	MG R	0.00 1/10W J	*
Y0001-02	NRS402J-OROX	MG R	0.00 1/10W J	*

AV SEL & MSP P.W. BOARD ASS'Y (SJH0S001A-U2)

Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R0101-02	NRS402J-750X	MG R	750 1/10W J	*
R0103	QRE141J-271Y	C R	270 1/4W J	*
R0104	QRE01GJ-101	OM R	100 1W J	*
R0105	NRS402J-221X	MG R	220 1/10W J	*
R0106	NRS402J-822X	MG R	8.2k 1/10W J	*
R0107-08	NRS402J-750X	MG R	750 1/10W J	*
R0109-10	NRS402J-100X	MG R	100 1/10W J	*
R0111-12	NRS402J-820X	MG R	820 1/10W J	*
R0113-14	NRS402J-101X	MG R	100 1/10W J	*
R0115	NRS402J-OROX	MG R	0.00 1/10W J	*
R0116	NRS402J-331X	MG R	330 1/10W J	*
R0117	NRS402J-152X	MG R	1.5k 1/10W J	*
R0118	NRS402J-181X	MG R	180 1/10W J	*
R0119-22	NRS402J-471X	MG R	470 1/10W J	*
R0123-24	NRS402J-823X	MG R	8.2k 1/10W J	*
R0125	NRS402J-OROX	MG R	0.00 1/10W J	*
R0126	NRS402J-391X	MG R	390 1/10W J	*
R0127	NRS402J-OROX	MG R	0.00 1/10W J	*
R0128	NRS402J-391X	MG R	390 1/10W J	*
R0129-30	NRS402J-103X	MG R	10k 1/10W J	*
R0131	NRS402J-682X	MG R	6.8k 1/10W J	*
R0132	NRS402J-472X	MG R	4.7k 1/10W J	*
R0133	QRE141J-101Y	C R	100 1/4W J	*
R0201-02	NRS402J-750X	MG R	750 1/10W J	*
R0203	NRS402J-221X	MG R	220 1/10W J	*
R0204	NRS402J-331X	MG R	330 1/10W J	*
R0205	NRS402J-750X	MG R	750 1/10W J	*
R0206	QRE01GJ-101	OM R	100 1W J	*
R0207	QRE141J-151Y	C R	150 1/4W J	*
R0208	QRE141J-101Y	C R	100 1/4W J	*
R0210-11	NRS402J-182X	MG R	1.8k 1/10W J	*
R0212	NRS402J-333X	MG R	33k 1/10W J	*
R0213	NRS402J-393X	MG R	39k 1/10W J	*
R0214-15	NRS402J-152X	MG R	1.5k 1/10W J	*
R0221-22	NRS402J-471X	MG R	4.7k 1/10W J	*
R0223-24	NRS402J-823X	MG R	8.2k 1/10W J	*
R0225	NRS402J-OROX	MG R	0.00 1/10W J	*
R0226	NRS402J-391X	MG R	390 1/10W J	*
R0227	NRS402J-OROX	MG R	0.00 1/10W J	*
R0228	NRS402J-391X	MG R	390 1/10W J	*
R0229-30	NRS402J-103X	MG R	10k 1/10W J	*
R0233	NRS402J-822X	MG R	8.2k 1/10W J	*
R0234	NRS402J-682X	MG R	6.8k 1/10W J	*
R0301	QRE121J-221Y	C R	220 1/2W J	*
R0304-05	NRS402J-OROX	MG R	0.00 1/10W J	*
R0403	QR29017-470	FUSE RESISTOR	47 1/4W J	*
R0408-09	NRS402J-OROX	MG R	0.00 1/10W J	*
R0412-17	NRS402J-103X	MG R	10k 1/10W J	*
R0419	NRS402J-222X	MG R	2.2k 1/10W J	*
R0521	NRS402J-OROX	MG R	0.00 1/10W J	*
R0525	NRS402J-102X	MG R	1k 1/10W J	*
R0526	NRS402J-681X	MG R	680 1/10W J	*
R0527	NRS402J-822X	MG R	8.2k 1/10W J	*
R0528	NRS402J-223X	MG R	2.2k 1/10W J	*
R0531	NRS402J-561X	MG R	560 1/10W J	*
R0601	NRS402J-223X	MG R	2.2k 1/10W J	*
R0603	NRS402J-272X	MG R	2.7k 1/10W J	*
R0605	NRS402J-822X	MG R	8.2k 1/10W J	*
R0607	NRS402J-122X	MG R	1.2k 1/10W J	*
R0608	NRS402J-272X	MG R	2.7k 1/10W J	*
R0609	NRS402J-822X	MG R	8.2k 1/10W J	*
R0610	NRS402J-223X	MG R	2.2k 1/10W J	*
R0616	NRS402J-103X	MG R	10k 1/10W J	*
R0617	NRS402J-471X	MG R	470 1/10W J	*
R0618	NRS402J-104X	MG R	100k 1/10W J	*

Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R0619	NRS402J-OROX	MG R	0.00 1/10W J	*
R0621	QRE01GJ-181	OM R	180 1W J	*
R0622-23	QRE121J-471Y	C R	470 1/2W J	*
R0626	NRS402J-OROX	MG R	0.00 1/10W J	*
R0628	NRS402J-OROX	MG R	0.00 1/10W J	*
CAPACITOR				
C0101	QETN1HM-1062	E CAP.	10uF 50V M	*
C0102	QETN1CM-4772	E CAP.	470uF 16V M	*
C0103	QETN1CM-2272	E CAP.	220uF 16V M	*
C0104	QETN1CM-1072	E CAP.	100uF 16V M	*
C0105-07	QETN1HM-1062	E CAP.	10uF 50V M	*
C0108	QEN61CM-1062	BP E CAP.	10uF 16V M	*
C0111	NCB21HK-472X	C CAP.	4700pF 50V K	*
C0113	NCB21HK-472X	C CAP.	4700pF 50V K	*
C0115-16	QENC1HM-1052	BP E CAP.	1uF 50V M	*
C0117-18	QETN1HM-1062	E CAP.	10uF 50V M	*
C0201	QETN1HM-1062	E CAP.	10uF 50V M	*
C0202	QFLC1HJ-1032	M CAP.	0.01uF 50V J	*
C0203-04	QETN1CM-4772	E CAP.	470uF 16V M	*
C0206	QETN1CM-4762	E CAP.	47uF 16V M	*
C0207-08	QETN1CM-1072	E CAP.	100uF 16V M	*
C0211	NCB21HK-472X	C CAP.	4700pF 50V K	*
C0213	NCB21HK-472X	C CAP.	4700pF 50V K	*
C0215-16	QETN1HM-1052	E CAP.	1uF 50V M	*
C0217-18	QETN1HM-1062	E CAP.	10uF 50V M	*
C0219	NDC21HJ-220X	C CAP.	22pF 50V J	*
C0301	QETN1CM-4762	E CAP.	47uF 16V M	*
C0304-05	QETN1HM-1052	E CAP.	1uF 50V M	*
C0401	QETN1CM-1072	E CAP.	100uF 16V M	*
C0402	NCF21EZ-104X	C CAP.	0.1uF 25V Z	*
C0403	QENC1CM-1062	BP E CAP.	10uF 16V M	*
C0404	QETN1CM-4772	E CAP.	470uF 16V M	*
C0405	NCF21EZ-104X	C CAP.	0.1uF 25V Z	*
C0406-07	NCB21HK-103X	C CAP.	0.01uF 50V K	*
C0514	NRS402J-OROX	MG R	0.00 1/10W J	*
C0521	QETN1CM-4762	E CAP.	47uF 16V M	*
C0522	NCB21HK-472X	C CAP.	4700pF 50V K	*
C0523	NDC21HJ-820X	C CAP.	82pF 50V J	*
C0524	NDC21HJ-470X	C CAP.	47pF 50V J	*
C0526	NDC21HJ-390X	C CAP.	39pF 50V J	*
C0601-02	QDC31HJ-2802	C CAP.	2.0pF 50V J	*
C0603-04	NCB21HK-103X	C CAP.	0.01uF 50V K	*
C0605-06	QETN1HM-1062	E CAP.	10uF 50V M	*
C0607-09	NCF21EZ-104X	C CAP.	0.1uF 25V Z	*
C0610	QETN1CM-1072	E CAP.	100uF 16V M	*
C0611-12	NDC21HJ-471X	C CAP.	470pF 50V J	*
C0613	NCF21EZ-104X	C CAP.	0.1uF 25V Z	*
C0614-15	QETN1HM-1062	E CAP.	10uF 50V M	*
C0616	NCF21EZ-104X	C CAP.	0.1uF 25V Z	*
C0617-18	QETN1HM-1062	E CAP.	10uF 50V M	*
C0619-22	NCB21HK-102X	C CAP.	1000pF 50V K	*
C0623	NCB21HK-103X	C CAP.	0.01uF 50V K	*
C0624	NCF21EZ-104X	C CAP.	0.1uF 25V Z	*
C0625-26	NCB21HK-102X	C CAP.	1000pF 50V K	*
C0627-28	NDC21HJ-391X	C CAP.	390pF 50V J	*
C0629	NDC21HJ-560X	C CAP.	56pF 50V J	*
C0631-32	NCB21HK-562X	C CAP.	5600pF 50V K	*
C0633	NDC21HJ-560X	C CAP.	56pF 50V J	*
C0635-36	QETN1HM-1052	E CAP.	1uF 50V M	*
C0637	QETN1CM-1072	E CAP.	100uF 16V M	*
C0638-39	QRN143J-OROX	C R	0.00 1/4W J	*
C0641	QETN1CM-4762	E CAP.	47uF 16V M	*
C0644	NCB21HK-472X	C CAP.	4700pF 50V K	*
C0650	QETN1HM-1052	E CAP.	1uF 50V M	*
C0651	QETN1CM-1072	E CAP.	100uF 16V M	*

Symbol No.	Part No.	Part Name	Description	Lot
COIL				
C0652-53	QENC1CM-1062	BP E CAP.	10uF 16V M	
L0105	QOR0716-0012	LEAD CORE		
L0205	QOR0716-0012	LEAD CORE		
L0504	QLL01BK-1802	COIL	18uH	
L0505	QLL01BK-2202	COIL	22uH	
L0606	QLL01BK-472	COIL	4.7uH	
L0607	QLL01BK-1002	COIL	10uH	
DIODE				
D0101	MA3051/M/-X	ZENER DIODE		
D0301	MA3130/H/-X	ZENER DIODE		
D0304-05	MA3130/H/-X	ZENER DIODE		
D0401-02	MA3130/H/-X	ZENER DIODE		
D0403	MA3100/L/-X	ZENER DIODE		
D0601	RDB.2E/B2/-T2	ZENER DIODE		
D0602	MA3062/M/-X	ZENER DIODE		
TRANSISTOR				
Q0101	2SC1815/YG/-T	SI. TRANSISTOR		
Q0102	2SC2712/YG/-X	SI. TRANSISTOR		
Q0103-04	DTL323TK-X	DIGI. TRANSISTOR		
Q0105	2SA1162/YG/-X	SI. TRANSISTOR		
Q0201	2SC1815/YG/-T	SI. TRANSISTOR		
Q0202	2SA1162/YG/-X	SI. TRANSISTOR		
Q0203-04	DTL323TK-X	DIGI. TRANSISTOR		
Q0401-03	2SC2712/YG/-X	SI. TRANSISTOR		
Q0503	2SC2712/YG/-X	SI. TRANSISTOR		
Q0602	2SA1162/YG/-X	SI. TRANSISTOR		
Q0603	DTL323TK-X	DIGI. TRANSISTOR		
IC				
IC0401	TEA6416	I. C. (MONO-ANA)		
IC0601	MSP34100-PP-B4	I. C. (DIGI-OTHER)		
IC0602	BA4558	I. C. (MONO-ANA)		
OTHERS				
J0001-02	CE40529-009J	21 PIN SOCKET		
LC0601	CE42142-1032	EMI FILTER		
W0004	NRS402J-OROX	MG R	0.00 1/10W J	
W0037	NRS402J-OROX	MG R	0.00 1/10W J	
W0052	NRS402J-OROX	MG R	0.00 1/10W J	
W0059	NRS402J-OROX	MG R	0.00 1/10W J	
W0063-68	NRS402J-OROX	MG R	0.00 1/10W J	
W0070-72	NRS402J-OROX	MG R	0.00 1/10W J	
W0074-76	NRS402J-OROX	MG R	0.00 1/10W J	
X0601	CE42546-001Z	CRYSTAL		
Y0101	NRS402J-OROX	MG R	0.00 1/10W J	
Y0601-03	NRS402J-OROX	MG R	0.00 1/10W J	
Y0605-06	NRS402J-OROX	MG R	0.00 1/10W J	
Y0609-10	NRS402J-OROX	MG R	0.00 1/10W J	

AV-25TS4EN

PRINTED WIRING BOARD PARTS LIST

MAIN P.W. BOARD ASS'Y (SJH-1002A-U2)

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1001	QRK126J-474X	C R	470KΩ 1/2W J *	
R1002	NRS402J-104X	MG R	100KΩ 1/10W J *	
R1003-06	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1101-02	NRS402J-101X	MG R	100Ω 1/10W J *	
R1103-04	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1105	NRS402J-562X	MG R	5.6KΩ 1/10W J *	
R1106	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1107	NRS402J-561X	MG R	560Ω 1/10W J *	
R1108	NRS402J-105X	MG R	1MΩ 1/10W J *	
R1109	NRS402J-273X	MG R	27KΩ 1/10W J *	
R1112-14	NRS402J-101X	MG R	100Ω 1/10W J *	
R1115-18	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1119	NRS402J-333X	MG R	33KΩ 1/10W J *	
R1120	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1121	NRS402J-472X	MG R	4.7KΩ 1/10W J *	
R1123	NRS402J-103X	MG R	10KΩ 1/10W J *	
R1125	NRS402J-471X	MG R	470Ω 1/10W J *	
R1401-02	NRS402J-103X	MG R	10KΩ 1/10W J *	
R1403	NRS402J-682X	MG R	6.8KΩ 1/10W J *	
R1404	NRS402J-183X	MG R	18KΩ 1/10W J *	
R1405	NRS402J-223X	MG R	22KΩ 1/10W J *	
R1406	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1407-08	NRS402J-103X	MG R	10KΩ 1/10W J *	
R1409	NRS402J-473X	MG R	47KΩ 1/10W J *	
R1411	NRS402J-0R0X	MG R	0.0Ω 1/10W J *	
R1412	QRA14CF-2202Y	MF R	22KΩ 1/4W F *	
R1413	QRA14CF-1002Y	MF R	10KΩ 1/4W F *	
R1414	NRS402J-0R0X	MG R	0.0Ω 1/10W J *	
R1415	QRE121J-4R7Y	C R	4.7Ω 1/2W J *	
R1416	QR001GJ-1R2	MF R	1.2Ω 1W J *	
R1419	QRE121J-1R0Y	C R	1.0Ω 1/2W J *	
R1420	QR001GJ-151	OM R	150Ω 1W J *	
R1461	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1462	NRS402J-562X	MG R	5.6KΩ 1/10W J *	
R1463-64	NRS402J-221X	MG R	220Ω 1/10W J *	
R1465	NRS402J-472X	MG R	4.7KΩ 1/10W J *	
R1466	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1467	QRE121J-103Y	C R	10KΩ 1/2W J *	
R1468	QRA14CF-2491Y	MF R	2.49KΩ 1/4W F *	
R1469-70	NRS402J-333X	MG R	33KΩ 1/10W J *	
R1471	NRS402J-222X	MG R	2.2KΩ 1/10W J *	
R1472	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1473	NRS402J-333X	MG R	33KΩ 1/10W J *	
R1474	NRS402J-331X	MG R	330Ω 1/10W J *	
R1475	QRJ146J-2R2X	C R	2.2Ω 1/4W J *	
R1476	QRE121J-103Y	C R	10KΩ 1/2W J *	
R1477	QRE121J-222Y	C R	2.2KΩ 1/2W J *	
R1478	QRE121J-183Y	C R	18KΩ 1/2W J *	
R1479	QRL039J-390	OM R	39Ω 3W J *	
R1480-82	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1483	NRS402J-104X	MG R	100KΩ 1/10W J *	
R1484	NRS402J-103X	MG R	10KΩ 1/10W J *	
R1485	NRS402J-563X	MG R	56KΩ 1/10W J *	
R1486	NRS402J-272X	MG R	2.7KΩ 1/10W J *	
R1501	NRS402J-681X	MG R	680Ω 1/10W J *	
R1502	NRS402J-103X	MG R	10KΩ 1/10W J *	
R1503	NRS402J-104X	MG R	100KΩ 1/10W J *	
R1504	NRS402J-103X	MG R	10KΩ 1/10W J *	
R1505	NRS402J-0R0X	MG R	0.0Ω 1/10W J *	
R1506	NRS402J-222X	MG R	2.2KΩ 1/10W J *	
R1507	QRE121J-152Y	C R	1.5KΩ 1/2W J *	

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1508	QRG029J-332	OM R	3.3KΩ 2W J *	
R1509	QRG029J-392	OM R	3.9KΩ 2W J *	
R1521	QRE121J-150Y	C R	15Ω 1/2W J *	
R1522	QRG029J-103	OM R	10KΩ 2W J *	
R1523	QRE121J-471Y	C R	470Ω 1/2W J *	
R1525	QRF074K-3R3	UNF R	3.3Ω 7W K *	
R1531	QRE121J-104Y	C R	100KΩ 1/2W J *	
R1532	NRS402J-123X	MG R	12KΩ 1/10W J *	
R1533	QRE121J-152Y	C R	1.5KΩ 1/2W J *	
R1552	QRZ9017-4R7	FUS1. RESISTOR	4.7 Ω 1/4W J *	
R1553	QRZ9017-1R0	FUS1. RESISTOR	1 Ω 1W J *	
R1554	QRZ9017-1R0	FUS1. RESISTOR	1 Ω 1W J *	
R1555	NRS402J-562X	MG R	5.6KΩ 1/10W J *	
R1556	NRS402J-183X	MG R	18KΩ 1/10W J *	
R1557	NRS402J-822X	MG R	8.2KΩ 1/10W J *	
R1581	QRE121J-562Y	C R	5.6KΩ 1/2W J *	
R1582	NRS402J-152X	MG R	1.5KΩ 1/10W J *	
R1583	NRS402J-183X	MG R	18KΩ 1/10W J *	
R1584	NRS402J-222X	MG R	2.2KΩ 1/10W J *	
R1585	QRA14CF-1501Y	MF R	15.0KΩ 1/4W F *	
R1586	QRA14CF-2941Y	MF R	2.94KΩ 1/4W F *	
R1587	NRS402J-273X	MG R	27KΩ 1/10W J *	
R1601	QRK126J-2R2X	C R	2.2Ω 1/2W J *	
R1603	QRK126J-2R2X	C R	2.2Ω 1/2W J *	
R1604-05	NRS402J-223X	MG R	22KΩ 1/10W J *	
R1606	NRS402J-104X	MG R	100KΩ 1/10W J *	
R1607	NRS402J-682X	MG R	6.8KΩ 1/10W J *	
R1608	NRS402J-104X	MG R	100KΩ 1/10W J *	
R1609	NRS402J-473X	MG R	47KΩ 1/10W J *	
R1610	NRS402J-0R0X	MG R	0.0Ω 1/10W J *	
R1611	NRS402J-273X	MG R	27KΩ 1/10W J *	
R1613-14	NRS402J-223X	MG R	22KΩ 1/10W J *	
R1615	NRS402J-104X	MG R	100KΩ 1/10W J *	
R1616-17	NRS402J-333X	MG R	33KΩ 1/10W J *	
R1618-19	NRS402J-682X	MG R	6.8KΩ 1/10W J *	
R1620	NRS402J-0R0X	MG R	0.0Ω 1/10W J *	
R1621	NRS402J-561X	MG R	560Ω 1/10W J *	
R1632	NRS402J-103X	MG R	10KΩ 1/10W J *	
R1633	NRS402J-473X	MG R	47KΩ 1/10W J *	
R1634	NRS402J-562X	MG R	5.6KΩ 1/10W J *	
R1635	NRS402J-681X	MG R	680Ω 1/10W J *	
R1636-37	NRS402J-103X	MG R	10KΩ 1/10W J *	
R1638	NRS402J-681X	MG R	680Ω 1/10W J *	
R1639	NRS402J-473X	MG R	47KΩ 1/10W J *	
R1640	NRS402J-562X	MG R	5.6KΩ 1/10W J *	
R1641	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1701-02	NRS402J-682X	MG R	6.8KΩ 1/10W J *	
R1703	NRS402J-331X	MG R	330Ω 1/10W J *	
R1704	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1709	NRS402J-103X	MG R	10KΩ 1/10W J *	
R1710	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1712	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1713	NRS402J-331X	MG R	330Ω 1/10W J *	
R1715-17	NRS402J-223X	MG R	22KΩ 1/10W J *	
R1718-19	NRS402J-101X	MG R	100Ω 1/10W J *	
R1720	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1721	NRS402J-392X	MG R	3.9KΩ 1/10W J *	
R1722	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1723	NRS402J-392X	MG R	3.9KΩ 1/10W J *	
R1724	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1725	NRS402J-392X	MG R	3.9KΩ 1/10W J *	

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1726	NRS402J-822X	MG R	8.2KΩ 1/10W J *	
R1727	NRS402J-472X	MG R	4.7KΩ 1/10W J *	
R1729	NRS402J-124X	MG R	120KΩ 1/10W J *	
R1730	NRS402J-683X	MG R	68KΩ 1/10W J *	
R1731	NRS402J-563X	MG R	56KΩ 1/10W J *	
R1732	NRS402J-822X	MG R	8.2KΩ 1/10W J *	
R1733-34	NRS402J-103X	MG R	10KΩ 1/10W J *	
R1735	NRS402J-223X	MG R	22KΩ 1/10W J *	
R1736	NRS402J-152X	MG R	15KΩ 1/10W J *	
R1737	NRS402J-103X	MG R	10KΩ 1/10W J *	
R1738	NRS402J-274X	MG R	270KΩ 1/10W J *	
R1739	NRS402J-472X	MG R	4.7KΩ 1/10W J *	
R1740	NRS402J-821X	MG R	820Ω 1/10W J *	
R1741	NRS402J-122X	MG R	1.2KΩ 1/10W J *	
R1743	NRS402J-101X	MG R	100Ω 1/10W J *	
R1744	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1745	NRS402J-331X	MG R	330Ω 1/10W J *	
R1747	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1749	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1751-56	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1759	NRS402J-821X	MG R	820Ω 1/10W J *	
R1760	NRS402J-821X	MG R	820Ω 1/10W J *	
R1761	NRS402J-103X	MG R	10KΩ 1/10W J *	
R1762	NRS402J-331X	MG R	330Ω 1/10W J *	
R1763	NRS402J-471X	MG R	470Ω 1/10W J *	
R1764	NRS402J-472X	MG R	4.7KΩ 1/10W J *	
R1768-73	NRS402J-472X	MG R	4.7KΩ 1/10W J *	
R1775	NRS402J-221X	MG R	220Ω 1/10W J *	
R1776	NRS402J-273X	MG R	27KΩ 1/10W J *	
R1777-78	NRS402J-103X	MG R	10KΩ 1/10W J *	
R1779	NRS402J-223X	MG R	22KΩ 1/10W J *	
R1780-81	NRS402J-103X	MG R	10KΩ 1/10W J *	
R1782	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1783	NRS402J-473X	MG R	47KΩ 1/10W J *	
R1784-85	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1786-92	NRS402J-221X	MG R	220Ω 1/10W J *	
R1793	NRS402J-104X	MG R	100KΩ 1/10W J *	
R1801	NRS402J-471X	MG R	470Ω 1/10W J *	
R1802-03	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1804	NRS402J-152X	MG R	1.5KΩ 1/10W J *	
R1805	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1808-10	NRS402J-333X	MG R	33KΩ 1/10W J *	
R1811	NRS402J-332X	MG R	3.3KΩ 1/10W J *	
R1812	NRS402J-822X	MG R	8.2KΩ 1/10W J *	
R1813	NRS402J-331X	MG R	330Ω 1/10W J *	
R1814	NRS402J-391X	MG R	390Ω 1/10W J *	
R1815	NRS402J-122X	MG R	1.2KΩ 1/10W J *	
R1819	NRS402J-393X	MG R	39KΩ 1/10W J *	
R1820	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1822	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1823	NRS402J-152X	MG R	1.5KΩ 1/10W J *	
R1824	NRS402J-271X	MG R	270Ω 1/10W J *	
R1825	NRS402J-152X	MG R	1.5KΩ 1/10W J *	
R1826	NRS402J-271X	MG R	270Ω 1/10W J *	
R1827	NRS402J-152X	MG R	1.5KΩ 1/10W J *	
R1828	NRS402J-271X	MG R	270Ω 1/10W J *	
R1901	QRF104K-3R9	UNF R	3.3Ω 1/2W K *	
R1902-03	QRE121J-474Y	C R	470KΩ 1/2W J *	
R1904	QRG039J-473	OM R	47KΩ 3W J *	
R1905	QRG039J-333	OM R	33KΩ 3W J *	
R1906	QRE121J-102Y	C R	1KΩ 1/2W J *	
R1907	QRW059J-R33	MP R	0.33Ω 5W J *	
R1910	NRS402J-181X	MG R	180Ω 1/10W J *	
R1911	QRE121J-470Y	C R	47Ω 1/2W J *	
R1912	NRS402J-0R0X	MG R	0.0Ω 1/10W J *	
R1914	NRS402J-562X	MG R	5.6KΩ 1/10W J *	
R1915	NRS402J-102X	MG R	1KΩ 1/10W J *	
R1916	NRS402J-273X	MG R	27KΩ 1/10W J *	

△	Symbol No.	Part No.	Part Name	Description	L
	RESISTOR				
	R1917	NRS402J-682X	MG R	6.8KΩ 1/10W J	
	R1918	NRS402J-102X	MG R	1KΩ 1/10W J	
	R1919	NRS402J-332X	MG R	3.3KΩ 1/10W J	
	R1920-21	NRS402J-103X	MG R	10KΩ 1/10W J	
	R1922	NRS402J-224X	MG R	220KΩ 1/10W J	
	R1951	QRF074J-102	UNF R	1KΩ 7W J	
	R1952	QRL029J-473	OM R	47KΩ 2W J	
	R1953	NRS402J-222X	MG R	2.2KΩ 1/10W J	
	R1954	NRS402J-473X	MG R	47KΩ 1/10W J	
	R1955	NRS402J-103X	MG R	10KΩ 1/10W J	
	R1956	QRG039J-R82	MF R	0.82Ω 3W J	
	R1958	NRS402J-120X	MG R	22Ω 1/10W J	
	R1959	NRS402J-822X	MG R	8.2KΩ 1/10W J	
	R1960	NRS402J-470X	MG R	47Ω 1/10W J	
	R1961	NRS402J-562X	MG R	5.6KΩ 1/10W J	
	R1963	NRS402J-183X	MG R	18KΩ 1/10W J	
	R1964	QRG016J-120	OM R	12Ω 1W J	
	R1966	QRG029J-180	OM R	18Ω 0.2W J	
	R1967	QRG029J-223	OM R	22Ω 0.2W J	
	R1968	QRG029J-270	OM R	27Ω 0.2W J	
	R1969	QRG016J-121	OM R	120Ω 1W J	
△	R1991	QRZ0057-825	C R	8.2MΩ 1W J	
	CAPACITOR				
	C1001	QETN1HM-1062	E CAP.	10μF 50V M	
	C1002	NCB21HK-222X	C CAP.	2200pF 50V K	
	C1003	QETN1CM-1082	E CAP.	1000μF 16V M	
	C1004	QETN1HM-1062	E CAP.	10μF 50V M	
	C1005	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	
	C1006	QETN1CM-1072	E CAP.	1000μF 16V M	
	Q1007-09	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	
	C1010	QETN1CM-1082	E CAP.	1000μF 16V M	
	C1011	NCB21HK-103X	C CAP.	0.01μF 50V K	
	C1012-03	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	
	C1104	NCB21HK-823X	CHIP CAP.	0.082μF 50V K	
	C1105	QETN1HM-4752	E CAP.	4.7μF 50V M	
	C1107-08	NCB21HK-103X	C CAP.	0.01μF 50V K	
	C1109	QETN1CM-1082	E CAP.	1000μF 16V M	
	C1110	NC21HJ-1210X	C CAP.	122pF 50V	
	C1111	QETN1HM-1062	E CAP.	10μF 50V M	
	C1112	NCB21HK-103X	C CAP.	0.01μF 50V K	
	C1113-15	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	
	C1116	QETN1HM-1052	E CAP.	1μF 50V M	
	C1117	NCB21HK-103X	C CAP.	0.01μF 50V K	
	C1118-20	QETN1HM-1052	E CAP.	1μF 50V M	
	C1121	QETN1HM-4752	E CAP.	4.7μF 50V M	
	C1122	QETN1CM-1072	E CAP.	1000μF 16V M	
	C1123	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	
	C1124	QETN1HM-1062	E CAP.	10μF 50V M	
	C1125	QETN1HM-1052	E CAP.	1μF 50V M	
	C1126	QETN1CM-4762	E CAP.	47μF 16V M	
	C1127	NCB21HK-103X	C CAP.	0.01μF 50V K	
	C1128	NC21HJ-390X	C CAP.	39pF 50V J	
	C1129	NC21HJ-680X	C CAP.	68pF 50V J	
	C1401	QETN1HM-1052	E CAP.	1μF 50V M	
	C1407	QEHK1HM-2272	E CAP.	2200pF 35V M	
	C1408	QETN1CM-1072	E CAP.	100μF 16V M	
	C1409	NC21HJ-152X	C CAP.	1500pF 50V J	
	C1410	QETN1MV-108	E CAP.	1000μF 35V M	
	C1412	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	
	C1413	QC20337-1802	C CAP.	18pF 500V J	
	C1416	NCB21HK-152X	C CAP.	1500pF 50V J	
	C1417	QFLC2AK-5632	M CAP.	0.056μF 100V J	
	C1418	QFV71HJ-1542	MF CAP.	0.15μF 50V J	
	C1424	NC21HJ-680X	C CAP.	68pF 50V J	
	C1428	QFLC2AK-1042	M CAP.	0.1μF 100V K	
	C1461	QFLC1HJ-8232	M CAP.	0.082μF 100V J	

Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C1462	QFV71HJ-1842	MF CAP.	0.18uF 50V J	*
C1463	QEM61HK-1252	E CAP.	2.2uF 25V K	*
C1464	QFP31HG-333	PP CAP.	0.033uF 50V G	*
C1468	NCB21HK-104X	CHIP CAP.	0.1uF 50V K	*
C1469	QETN1CM-1072	C CAP.	120pF 50V J	*
C1470	NDC21HJ-221X	C CAP.	330pF 50V J	*
C1471	QETM1CM-228	E CAP.	220uF 16V M	*
C1472	NCB21HK-103X	C CAP.	0.01uF 50V K	*
C1473	QEM61HK-4752	E CAP.	4.7uF 50V K	*
C1474	NCB21HK-103X	C CAP.	0.01uF 50V K	*
C1481	QEHRI1M-1062	E CAP.	100uF 50V M	*
C1501	QETN1CM-1072	E CAP.	100uF 16V M	*
C1502-04	NCB21HK-103X	C CAP.	0.01uF 50V K	*
C1505	NCB21HK-822X	C CAP.	8200pF 50V K	*
C1506	QETN1CM-1052	E CAP.	1uF 50V M	*
C1507	NCB21HK-103X	C CAP.	0.01uF 50V K	*
C1509	QCB32HK-6812	C CAP.	680pF 500V K	*
C1510	QEH2CM-1052	E CAP.	1uF 160V M	*
Δ C1521	QF70122-362	MPP CAP.	3.6KΩ1.8KVH±3%	*
Δ C1522	QF70153-8001	MPP CAP.	8000pF1.5KVH±2.5%	*
Δ C1523	QFP32G1-333	PP CAP.	0.033uF 400V J	*
Δ C1524	QF70119-474	MPP CAP.	0.47uF 200V ±3%	*
Δ C1525	QF70194-304	MPP CAP.	0.3uF 250V J	*
C1526	QEH2CM-4752	E CAP.	4.7uF 250V M	*
C1527	QCB32HK-5612	C CAP.	560pF 500V K	*
C1528	QETN2CM-227	E CAP.	220pF 160V M	*
Δ C1531	QF70119-204	MPP CAP.	0.2uF 200V ±3%	*
C1532-53	QEH21EM-108	E CAP.	1000uF 25V M	*
C1534	QETN2CM-1062	E CAP.	10uF 250V M	*
C1535	NCB21HK-104X	CHIP CAP.	0.1uF 50V K	*
C1581	QETN1AM-1072	E CAP.	100uF 10V M	*
C1582	QETN1CM-4762	E CAP.	47uF 16V M	*
C1583	QETN2AM-1062	E CAP.	10uF 100V M	*
C1584	QETN1AM-2272	E CAP.	220uF 10V M	*
C1602-03	QETN1HK-1052	E CAP.	1uF 50V M	*
C1604	QETN1HK-1072	E CAP.	100uF 50V M	*
C1605	QETN1HK-1062	E CAP.	10uF 50V M	*
C1606-09	NCF21H2-224X	C CAP.	0.22uF 50V Z	*
C1610	QETN1VM-108	E CAP.	1000uF 35V M	*
C1612	QETN1VM-108	E CAP.	1000uF 35V M	*
C1615	QETN1CM-2272	E CAP.	220uF 16V M	*
C1616	QETN1HK-228	E CAP.	220uF 50V M	*
C1620	NCB21HK-104X	CHIP CAP.	0.1uF 50V K	*
C1630	QETN1CM-2272	E CAP.	220uF 16V M	*
C1631	NCB21HK-104X	CHIP CAP.	0.1uF 50V K	*
C1633	NCB21HK-104X	CHIP CAP.	0.1uF 50V K	*
C1636-37	NCF21C2-105X	C CAP.	1uF 16V Z	*
C1638-39	NCB21HK-103X	C CAP.	0.01uF 50V K	*
C1701	QETN1EM-1082	E CAP.	1000uF 25V M	*
C1702	NCB21HK-104X	CHIP CAP.	0.1uF 50V K	*
C1703	QETN1HK-1062	E CAP.	10uF 50V M	*
C1704	QETN1AM-2272	E CAP.	220uF 10V M	*
C1705	NCB21HK-104X	CHIP CAP.	0.1uF 50V K	*
C1707	QETN1HK-1052	E CAP.	1uF 50V M	*
C1709	NCB21HK-680X	C CAP.	68pF 50V J	*
C1711	NCB21HK-104X	CHIP CAP.	0.1uF 50V K	*
C1712	QETN1AM-1072	E CAP.	100uF 10V M	*
C1713	NDC21HJ-220X	C CAP.	22pF 50V J	*
C1714	NCS21HJ-471X	C CAP.	470pF 50V J	*
C1715	NCB21HK-333X	C CAP.	0.033uF 50V K	*
C1716	NCB21HK-104X	CHIP CAP.	0.1uF 50V K	*
C1718	NDC21HJ-560X	C CAP.	56pF 50V J	*
C1719	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1720	QEN1CM-1052	BP E CAP.	1uF 50V M	*
C1721	NCB21HK-104X	CHIP CAP.	0.1uF 50V K	*
C1730	NCF21C2-105X	C CAP.	1uF 16V Z	*
C1731	NDC21HJ-821X	C CAP.	820pF 50V J	*
C1807	QETN1CM-4762	E CAP.	47uF 16V M	*

Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C1809	QETN1HM-1062	E CAP.	10uF 50V M	*
C1811	QETN1HM-1062	E CAP.	10uF 50V M	*
C1812	QETN1CM-1072	E CAP.	100uF 16V M	*
C1813	QETN1HM-1062	E CAP.	10uF 50V M	*
C1814	NCB21HK-103X	C CAP.	0.01uF 50V K	*
C1815	NCB21HK-104X	CHIP CAP.	0.1uF 50V K	*
C1816	QETN1HM-2262	E CAP.	22uF 50V M	*
C1817	NCB21HK-103X	C CAP.	0.01uF 50V K	*
C1818	NCB21HK-223X	C CAP.	0.022uF 50V K	*
C1819	NDC21HJ-221X	C CAP.	220pF 50V J	*
C1820-21	NDC21HJ-150X	C CAP.	15pF 50V J	*
C1822	NCB21HK-104X	CHIP CAP.	0.1uF 50V K	*
C1823-24	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1825	NDC21HJ-221X	C CAP.	220pF 50V J	*
C1826	NCB21HK-104X	CHIP CAP.	0.1uF 50V K	*
C1827	QETN01M-4772	E CAP.	470uF 6.3V M	*
C1828-29	NCB21HK-104X	CHIP CAP.	0.1uF 50V K	*
Δ C1901	QC29054-472	C CAP.	4700pFAC250V Z	*
Δ C1902	QC29054-472	C CAP.	4700pFAC250V Z	*
Δ C1903	QC29054-472	C CAP.	4700pFAC250V Z	*
C1904	QETN195-227	E CAP.	220uF 400V M	*
C1905	QCB32HK-103	C CAP.	0.01uF 500V K	*
C1906	QC20122-391	C CAP.	390pF 2000V K	*
C1908	QC20122-221	C CAP.	220pF 2000V K	*
C1909	QC20122-391	C CAP.	390pF 2000V K	*
C1911	NCB21HK-104X	CHIP CAP.	0.1uF 50V K	*
C1912	QETN1EM-1072	E CAP.	100uF 25V M	*
C1913	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1914	NCS21HJ-101X	C CAP.	100pF 50V J	*
C1915	NDC21HJ-821X	C CAP.	820pF 50V J	*
C1916	QETN1HM-1052	E CAP.	1uF 50V M	*
C1917	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1951	QC20131-561	C CAP.	390pF 2000V K	*
C1952-53	QC20133-1022	C CAP.	1000pF 500V K	*
C1954	QC20133-1012	C CAP.	100pF 1000V K	*
C1955	NCB21HK-104X	CHIP CAP.	0.1uF 50V K	*
C1956	QC20203-227	E CAP.	220uF 160V M	*
C1957	QC20257-228	E CAP.	220uF 25V M	*
C1959	QEHRIEM-1082	E CAP.	1000uF 25V M	*
C1962	QEHRIEM-4772	E CAP.	470uF 16V M	*
C1965	QEH81VM-108	E CAP.	1000uF 35V M	*
C1966	NCB21HK-473X	C CAP.	0.047uF 50V K	*
C1972	QFV71HJ-6842	MF CAP.	0.68uF 50V J	*
C1973	QCB32HK-3922	C CAP.	390pF 500V K	*
C1974-75	NCB21HK-104X	CHIP CAP.	0.1uF 50V K	*
C1976	QETN1CM-2272	E CAP.	220pF 16V M	*
C1977	NCB21HK-104X	CHIP CAP.	0.1uF 50V K	*
C1978	QEHRIEM-2272	E CAP.	220pF 16V M	*
C1979	NCB21HK-104X	CHIP CAP.	0.1uF 50V K	*
C1980	QEHCIAM-2272	E CAP.	220uF 10V M	*
C1981	QETN1CM-2272	E CAP.	220pF 16V M	*
Δ C1992	QC29079-471	C CAP.	470pFAC250V K	*
Δ C1993	QC29079-332	C CAP.	3300pFAC250V K	*
C1994	NCB21HK-103X	C CAP.	0.01uF 50V K	*
TRANSFORMER				
T1501	CE42034-002	H. DRIVE TRANSF.		*
T1521	CE42549-001J1	BRIDGE COIL		*
Δ T1901	CETS121-001JC	SW TRANSF.		*
COIL				
L1001	QQL01BK-2702	COIL	27uH	*
L1003-04	QQL01BK-8R22	COIL	8.2uH	*
L1006	QQL01BK-SR62	COIL	5.6uH	*
L1010	QQL01BK-SR62	COIL	5.6uH	*

Symbol No.	Part No.	Part Name	Description	Local
COIL				
L1101	QQL01BK-2212	COIL	220uH	*
L1102	QQL01BK-4R72	COIL	4.7uH	*
L1103	QQL01BK-3302	COIL	33uH	*
L1461	CE42567-001J1	INJECTION COIL		*
L1521	CE41012-001J2	LINEARITY COIL		*
L1551	QQL2018-800	HEATER CHOKE		*
L1701	QQL01BK-8R22	COIL	8.2uH	*
L1702	QQL01BK-2212	COIL	220uH	*
L1801	QQL01BK-3R32	COIL	3.3uH	*
L1802	QQL01BK-4R72	COIL	4.7uH	*
L1901	QQL26AM-2R72	CHOKE COIL		*
L1951	QQL2018-460	HEATER CHOKE		*
L1954	QQL26AM-2202	COIL	22uH	*
L1958	QQL26AM-SR62	CHOKE COIL		*
L1960-61	QQL26AM-SR62	CHOKE COIL		*
DIODE				
D1101	MA111-X	SI. DIODE		*
D1402	1N4003-T2	SI. DIODE		*
D1461	MA3039/H/-X	ZENER DIODE		*
D1462	MA3120/M/-X	ZENER DIODE		*
D1463-64	MA3220/M/-X	ZENER DIODE		*
D1481	MA111-X	SI. DIODE		*
D1482	MA3220/M/-X	ZENER DIODE		*
D1501	MA3091/M/-X	ZENER DIODE		*
D1521	BY228-20	SI. DIODE		*
D1522	BYW95B-20	SI. DIODE		*
D1523	BYD33C-T3	SI. DIODE		*
D1551-52	BYW95B-20	SI. DIODE		*
D1553-54	BYD33C-T3	SI. DIODE		*
D1555	BYD330-T3	SI. DIODE		*
D1581	MA3150/M/-X	ZENER DIODE		*
D1582	MA3075/H/-X	CHIP ZENER DIODE		*
D1583	BYD330-T3	SI. DIODE		*
D1584	MTJ17-55-T2	ZENER DIODE		*
D1601-02	MA3330/L/-X	ZENER DIODE		*
D1604	MA153A-X	SI. DIODE		*
D1605	MA111-X	SI. DIODE		*
D1606	MA153A-X	SI. DIODE		*
D1608	MA111-X	SI. DIODE		*
D1609	MA152WK-X	SI. DIODE		*
D1613	MA111-X	SI. DIODE		*
D1615	MA111-X	SI. DIODE		*
D1701-02	MA700A-X	SI. DIODE		*
D1708-11	MA111-X	SI. DIODE		*
D1715	MA111-X	SI. DIODE		*
D1716	MA3068/M/-X	ZENER DIODE		*
D1801-02	MA111-X	SI. DIODE		*
Δ D1901	D35BA60	DIODE BRIDGE		*
D1902	BYD33M-T3	SI. DIODE		*
D1903	BYD330-T3	SI. DIODE		*
Δ C1952	ICP-N50-Y	I. C. PROTECT		*
D1951	RO4B-F1	SI. DIODE		*
D1952-53	BYD33M-T3	SI. DIODE		*
D1954	MC22-6	THYRISTOR		*
D1955	15R35-400A-T2	SI. DIODE		*
D1956	BYD330-T3	SI. DIODE		*
D1957-58	BYW95B-20	SI. DIODE		*
D1959	SF6L20U	SI. DIODE		*
D1962	MTJ15B-T2	ZENER DIODE		*
D1964	MA3150/M/-X	ZENER DIODE		*
D1965	MA3075/H/-X	ZENER DIODE		*
D1966	MA3330/L/-X	ZENER DIODE		*
D1967	MA3051/M/-X	ZENER DIODE		*
D1980-82	MA111-X	SI. DIODE		*
D1983	MTJ22B-T2	ZENER DIODE		*
D1984	15R35-400A-T2	SI. DIODE		*

Δ	Symbol No.	Part No.	Part Name	Description	L
TRANSISTOR					
	Q1101	2SA1162/YG/-X	SI. TRANSISTOR		
	Q1103	DT144EKA-X	DIGI. TRANSISTOR		
	Q1461-64	2SC2712/YG/-X	SI. TRANSISTOR		
	Q1465	2SD140B/OM/-LB	SI. TRANSISTOR		
	Q1481-82	2SC2712/YG/-X	SI. TRANSISTOR		
	Q1501	BSN274	F. E. T.		
Δ	Q1521	BUS208AY	POWER TRANSISTOR		H. OUT
	Q1531	2SK2459N-F54	POWER MOS FET		
	Q1532	DT124EKA-X	DIGI. TRANSISTOR		
	Q1581	2SA949/Y/Z1	SI. TRANSISTOR		
	Q1582	DT124EKA-X	DIGI. TRANSISTOR		
	Q1583	2SC2712/YG/-X	SI. TRANSISTOR		
	Q1601	2SC2712/YG/-X	SI. TRANSISTOR		
	Q1602	2SA1162/YG/-X	SI. TRANSISTOR		
	Q1603-04	DT1237K-X	DIGI. TRANSISTOR		
	Q1605-06	2SA1162/YG/-X	SI. TRANSISTOR		
	Q1607-08	DT1237K-X	DIGI. TRANSISTOR		
	Q1610-11	2SA1162/YG/-X	SI. TRANSISTOR		
	Q1701-06	2SC2712/YG/-X	SI. TRANSISTOR		
	Q1707	2SA1162/YG/-X	SI. TRANSISTOR		
	Q1801	2SA1162/YG/-X	SI. TRANSISTOR		
	Q1802	DT124EKA-X	DIGI. TRANSISTOR		
	Q1806-07	2SC2712/YG/-X	SI. TRANSISTOR		
	Q1901	MTAN60E	F. E. T.		
	Q1951	2SC2712/YG/-X	SI. TRANSISTOR		
	Q1952-53	DT124EKA-X	DIGI. TRANSISTOR		
IC					
	IC1101	TB1227AN	I. C. (DIGI-OTHER)		
	IC1401	LA7841	I. C. (MONO-ANA)		
	IC1461	TAB859CP	I. C. (MONO-ANA)		
	IC1601	TAB246H	I. C.		
	IC1701	M37207MF-15SSP	I. C. (MICRO-COMP)		
	IC1702	L781ROSE-MA	I. C. (MONO-ANA)		
	IC1703	AT24C163754EN	I. C.		(SERVICE)
	IC1802	TC4038BP/MT	I. C.		
	IC1804	CF70206	I. C. (DIGI-MOS)		
	IC1805	CF72417	I. C. (DIGI-MOS)		
	IC1901	MC4604P	I. C. (MONO-ANA)		
	IC1951	BA12T	I. C.		
	IC1952	AN7809P	I. C. (MONO-ANA)		
	IC1953	AN7805F	I. C. (MONO-ANA)		
	IC1954	5E135N	I. C. (HYBRID)		
OTHERS					
		CM46279-001-E	SHIELD PLATE		
	CM1006	CM1006-25T-AE	FFC CONNECTOR		
Δ	CP1951	ICP-W80-V	I. C. PROTECT		
Δ	CP1952	ICP-W30-V	I. C. PROTECT		
Δ	CP1955	ICP-W30-V	I. C. PROTECT		
	J1001	QWNO296-001	PIN JACK		
	K1001	CE41433-001Z	BEADS CORE		
	K1002-03	CE42681-001Y	BEADS CORE		
	K1005	CE41433-001Z	BEADS CORE		
	K1402	CE41433-001Z	BEADS CORE		
	K1403	CE42681-001Y	BEADS CORE		
	K1601-02	CE42681-001Y	BEADS CORE		
	K1901	QQR0872-001Y	FERRITE BEADS		
	K1903	QQR0872-001Y	FERRITE BEADS		
	K1951	QQR0872-001Y	FERRITE BEADS		
	K1953-55	CE41433-001Z	BEADS CORE		
	PC1531	TLP6211-B	I. C. (PH. COUPLER)		
Δ	PC1901	TLP73211-DA-(GR)	I. C. (PH. COUPLER)		
	CE1401	CE4K481-B04	TUNER		
	X1101	QX40305-001Z	CRYSTAL		
	X1701	C578.00MTW	CER. RESONATOR		

Symbol No.	Part No.	Part Name	Description	Local
OTHERS				
X1801	CE41257-0012	CRYSTAL		*
Y1463	NRSAG2J-080X	MG R	0.00 1/10W J	*
Y1603	NRSAG2J-080X	MG R	0.00 1/10W J	*
Y1605-07	NRSAG2J-080X	MG R	0.00 1/10W J	*
Y1801-02	NRSAG2J-080X	MG R	0.00 1/10W J	*
Y1555	NRSAG2J-080X	MG R	0.00 1/10W J	*
Y1557	NRSAG2J-080X	MG R	0.00 1/10W J	*

CRT SOCKET P.W. BOARD ASS'Y (SJH-3001A-U2)

Refer to PARTS LIST in page 40 for this P.W. board.

FRONT CONTROL P.W. BOARD ASS'Y (SJH-8002A-U2)

Refer to PARTS LIST in page 41 for this P.W. board.

IF P.W. BOARD ASS'Y (SJH0F001A-U2)

Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R0003	NRSAG2J-332X	MG R	3.3kΩ 1/10W J	*
R0004	NRSAG2J-272X	MG R	2.7kΩ 1/10W J	*
R0005-06	NRSAG2J-104X	MG R	10kΩ 1/10W J	*
R0007	NRSAG2J-273X	MG R	27kΩ 1/10W J	*
R0008	NRSAG2J-151X	MG R	150Ω 1/10W J	*
R0009	NRSAG2J-224X	MG R	220kΩ 1/10W J	*
R0011	NRSAG2J-103X	MG R	10kΩ 1/10W J	*
R0012	NRSAG2J-102X	MG R	1kΩ 1/10W J	*
R0013	NRSAG2J-393X	MG R	39kΩ 1/10W J	*
R0014	NRSAG2J-124X	MG R	120kΩ 1/10W J	*
R0015	NRSAG2J-104X	MG R	100kΩ 1/10W J	*
R0020	NRSAG2J-472X	MG R	4.7kΩ 1/10W J	*
R0021	NRSAG2J-122X	MG R	1.2kΩ 1/10W J	*
R0022	NRSAG2J-331X	MG R	330Ω 1/10W J	*
R0023	NRSAG2J-101X	MG R	100Ω 1/10W J	*
R0024	NRSAG2J-080X	MG R	0.00 1/10W J	*
R0025	NRSAG2J-222X	MG R	2.2kΩ 1/10W J	*
R0026	NRSAG2J-112X	MG P	1.1kΩ 1/10W J	*
R0030-31	NRSAG2J-150X	MG R	150 1/10W J	*
R0032	NRSAG2J-472X	MG P	4.7kΩ 1/10W J	*
R0033	NRSAG2J-112X	MG R	1.1kΩ 1/10W J	*
R0037	NRSAG2J-102X	MG R	1kΩ 1/10W J	*
R0104	NRSAG2J-080X	MG R	0.00 1/10W J	*
R0105	NRSAG2J-102X	MG R	1kΩ 1/10W J	*
R0107-08	NRSAG2J-102X	MG R	1kΩ 1/10W J	*
R0109	NRSAG2J-222X	MG R	220Ω 1/10W J	*
R0110	NRSAG2J-222X	MG R	2.2kΩ 1/10W J	*
R0112-12	NRSAG2J-151X	MG R	150Ω 1/10W J	*
R0113	NRSAG2J-331X	MG R	330Ω 1/10W J	*
R0114	NRSAG2J-561X	MG R	560Ω 1/10W J	*
R0115	NRSAG2J-222X	MG R	2.2kΩ 1/10W J	*
R0116	NRSAG2J-562X	MG R	560Ω 1/10W J	*
R0124	NRSAG2J-103X	MG R	10kΩ 1/10W J	*

Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C0002	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C0003	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C0004	NCB21EK-104X	C CAP.	0.1μF 25V K	*
C0005-06	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C0007	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C0009	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C0010-11	QETN1CM-476Z	E CAP.	47μF 16V M	*
C0012	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C0020	NCB21HK-472X	C CAP.	4700pF 50V K	*
C0022-23	NCB21HK-472X	C CAP.	4700pF 50V K	*
C0025	NCB21HK-472X	C CAP.	4700pF 50V K	*
C0030	NCB21HK-472X	C CAP.	4700pF 50V K	*
C0032	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C0047	QETN1CM-227Z	E CAP.	220pF 16V M	*
C0101	QETN1CM-476Z	E CAP.	47μF 16V M	*
C0104	ND21HJ-271X	C CAP.	270pF 50V J	*
C0105	NC21B2-104X	C CAP.	0.1μF 25V Z	*
C0110	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C0111	QETN1CM-476Z	E CAP.	47μF 16V M	*

TRANSFORMER

T0001	CELT001-307	C. WAVE TRANSF.		*
T0020	QQR0626-001	T.F. TRANSF.		*

COIL

L0020	QOL2014-R47	PEAKING COIL	0.47μH	*
L0021	QOL01BK-1P5Z	COIL	1.5μH	*
L0041	QOL01BK-1P0Z	COIL	10μH	*
L0103	QOL01BK-1P0Z	COIL	1.0μH	*
L0104	QOL01BK-5R6Z	COIL	5.6μH	*

TRANSISTOR

Q0001	2SA1162/1G/-X	SI TRANSISTOR		*
Q0002-03	2SC2712/1G/-X	SI TRANSISTOR		*
Q0012	2SC5083/L-P/-T	SI TRANSISTOR		*
Q0104	2SC2712/1G/-X	SI TRANSISTOR		*
Q0105	2SC2712/1G/-X	SI TRANSISTOR		*
Q0107	2SA1162/1G/-X	SI TRANSISTOR		*
Q0109-10	2SC2712/1G/-X	SI TRANSISTOR		*
Q0112-13	DT144EKA-X	DIGI. TRANSISTOR		*
Q0124	DT144EKA-X	DIGI. TRANSISTOR		*

I C

IC0010	MS2760SP	I C		*
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OTHERS

CF0010-11	F1P40 40MF	CERAMIC FILTER		*
CF0100	TP55 5MW	CERAMIC FILTER		*
SF0010	QKX031-001	SAW FILTER		*
SF0012	QKX032-003	SAW FILTER		*
W0011-14	NRSAG2J-080X	MG R	0.00 1/10W J	*
W0125	NRSAG2J-080X	MG R	0.00 1/10W J	*
Y0011-02	NRSAG2J-080X	MG R	0.00 1/10W J	*

AV SEL & MSP P.W. BOARD ASS'Y

(SJH0S001A-U2)

Refer to PARTS LIST in page 42 for this P.W. board.

AV-25TS4EP**PRINTED WIRING BOARD PARTS LIST****MAIN P.W. BOARD ASS'Y (SJH-1702A-U2)**

Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1001	QRK126J-474X	C R	470kΩ 1/2W J	*
R1002	NRSAG2J-104X	MG R	100kΩ 1/10W J	*
R1003-06	NRSAG2J-102X	MG R	1kΩ 1/10W J	*
R1101-02	NRSAG2J-101X	MG R	100Ω 1/10W J	*
R1103-04	NRSAG2J-102X	MG R	1kΩ 1/10W J	*
R1105	NRSAG2J-562X	MG R	5.6kΩ 1/10W J	*
R1106	NRSAG2J-102X	MG R	1kΩ 1/10W J	*
R1107	NRSAG2J-561X	MG R	560Ω 1/10W J	*
R1108	NRSAG2J-105X	MG R	1MΩ 1/10W J	*
R1109	NRSAG2J-272X	MG R	27kΩ 1/10W J	*
R1112-14	NRSAG2J-101X	MG R	100Ω 1/10W J	*
R1115-16	NRSAG2J-102X	MG R	1kΩ 1/10W J	*
R1119	NRSAG2J-333X	MG R	33kΩ 1/10W J	*
R1120	NRSAG2J-102X	MG R	1kΩ 1/10W J	*
R1121	NRSAG2J-472X	MG P	4.7kΩ 1/10W J	*
R1123	NRSAG2J-103X	MG R	10kΩ 1/10W J	*
R1125	NRSAG2J-471X	MG R	470Ω 1/10W J	*
R1401-02	NRSAG2J-102X	MG R	10kΩ 1/10W J	*
R1403	NRSAG2J-682X	MG R	6.8kΩ 1/10W J	*
R1404	NRSAG2J-183X	MG P	18kΩ 1/10W J	*
R1405	NRSAG2J-223X	MG R	22kΩ 1/10W J	*
R1406	NRSAG2J-102X	MG R	1kΩ 1/10W J	*
R1407-08	NRSAG2J-103X	MG R	10kΩ 1/10W J	*
R1409	NRSAG2J-473X	MG R	47kΩ 1/10W J	*
R1411	NRSAG2J-080X	MG R	0.00 1/10W J	*
R1412	QRA14CF-2202Y	MF R	22kΩ 1/4W F	*
R1413	QRA14CF-1002Y	MF R	10kΩ 1/4W F	*
R1414	NRSAG2J-080X	MG R	0.00 1/10W J	*
R1415	QRE121J-487Y	C R	4.7Ω 1/2W J	*
R1416	QRK01GJ-1R2	MF R	1.2Ω 1W J	*
R1419	QRE121J-180Y	C P	1.0Ω 1/2W J	*
R1420	QRG01GJ-1S1	OM R	150Ω 1W J	*
R1461	NRSAG2J-102X	MG R	1kΩ 1/10W J	*
R1462	NRSAG2J-562X	MG R	5.6kΩ 1/10W J	*
R1463-64	NRSAG2J-222X	MG R	220Ω 1/10W J	*
R1465	NRSAG2J-472X	MG R	4.7kΩ 1/10W J	*
R1466	NRSAG2J-102X	MG R	1kΩ 1/10W J	*
R1467	QRE121J-103Y	C R	10kΩ 1/2W J	*
R1468	QRA14CF-24S1Y	MF R	2.4kΩ 1/4W F	*
R1469-70	NRSAG2J-333X	MG R	33kΩ 1/10W J	*
R1471	NRSAG2J-222X	MG P	2.2kΩ 1/10W J	*
R1472	NRSAG2J-102X	MG R	1kΩ 1/10W J	*
R1473	NRSAG2J-333X	MG R	33kΩ 1/10W J	*
R1474	NRSAG2J-331X	MG R	330Ω 1/10W J	*
R1475	QR144GJ-2R2X	C R	2.2Ω 1/4W J	*
R1476	QRE121J-103Y	C R	10kΩ 1/2W J	*
R1477	QRE121J-222Y	C R	2.2kΩ 1/2W J	*
R1478	QRE121J-183Y	C R	18kΩ 1/2W J	*
R1479	QRL039J-39X	OM R	39Ω 3W J	*
R1480-82	NRSAG2J-102X	MG R	1kΩ 1/10W J	*
R1483	NRSAG2J-104X	MG R	100kΩ 1/10W J	*
R1484	NRSAG2J-103X	MG R	10kΩ 1/10W J	*
R1485	NRSAG2J-561X	MG R	56kΩ 1/10W J	*
R1486	NRSAG2J-272X	MG R	2.7kΩ 1/10W J	*
R1501	NRSAG2J-681X	MG R	680Ω 1/10W J	*
R1502	NRSAG2J-103X	MG R	10kΩ 1/10W J	*
R1503	NRSAG2J-104X	MG R	100kΩ 1/10W J	*
R1504	NRSAG2J-103X	MG R	10kΩ 1/10W J	*
R1505	NRSAG2J-080X	MG R	0.00 1/10W J	*
R1506	NRSAG2J-222X	MG R	2.2kΩ 1/10W J	*
R1507	QRE121J-152Y	C R	1.5kΩ 1/2W J	*

Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1508	QRG029J-33Z	OM P	3.3kΩ 2W J	*
R1509	QRG029J-39Z	OM R	3.9kΩ 2W J	*
R1521	QRE121J-150Y	C R	150 1/2W J	*
R1522	QRG029J-10Z	OM R	10kΩ 2W J	*
R1523	QRE121J-471Y	C R	470Ω 1/2W J	*
R1525	QRFO74K-3R3	UNF R	3.3Ω 7W K	*
R1531	QRE121J-104Y	C R	100kΩ 1/2W J	*
R1532	NRSAG2J-123X	MG R	12kΩ 1/10W J	*
R1533	QRE121J-152Y	C R	1.5kΩ 1/2W J	*
Δ R1552	QR29017-4R7	FUS1.RESISTOR	4.7 Ω 1/4W J	*
Δ R1553	QR29021-1R0	FUS1.RESISTOR	1 Ω 1W J	*
Δ R1554	QR29021-1R0	FUS1.RESISTOR	1 Ω 1W J	*
R1555	NRSAG2J-562X	MG R	5.6kΩ 1/10W J	*
R1556	NRSAG2J-183X	MG R	18kΩ 1/10W J	*
R1557	NRSAG2J-822X	MG R	8.2kΩ 1/10W J	*
R1561	QRE121J-562Y	C R	5.6kΩ 1/2W J	*
R1562	NRSAG2J-152Y	MG R	1.5kΩ 1/10W J	*
R1563	NRSAG2J-183X	MG R	18kΩ 1/20W J	*
R1584	NRSAG2J-222X	MG R	2.2kΩ 1/10W J	*
Δ R1585	QRA14CF-1582Y	MF R	15.8kΩ 1/4W F	*
Δ R1586	QRA14CF-2941Y	MF R	2.94kΩ 1/4W F	*
R1587	NRSAG2J-273X	MG R	27kΩ 1/10W J	*
R1601	QRK126J-2R2X	C R	2.2Ω 1/2W J	*
R1603	QRK126J-2R2X	C R	2.2Ω 1/2W J	*
R1604-05	NRSAG2J-202X	MG R	20kΩ 1/10W J	*
R1606	NRSAG2J-104X	MG R	100kΩ 1/10W J	*
R1607	NRSAG2J-682X	MG R	6.8kΩ 1/10W J	*
R1608	NRSAG2J-104X	MG R	100kΩ 1/10W J	*
R1609	NRSAG2J-473X	MG R	47kΩ 1/10W J	*
R1610	NRSAG2J-080X	MG R	0.0Ω 1/10W J	*
R1611	NRSAG2J-273X	MG R	27kΩ 1/10W J	*
R1613-14	NRSAG2J-223X	MG R	22kΩ 1/10W J	*
R1615	NRSAG2J-104X	MG R	100kΩ 1/10W J	*
R1616-17	NRSAG2J-333X	MG R	33kΩ 1/10W J	*
R1618-19	NRSAG2J-682X	MG R	6.8kΩ 1/10W J	*
R1620	NRSAG2J-080X	MG R	0.0Ω 1/10W J	*
R1621	NRSAG2J-561X	MG R	560Ω 1/10W J	*
R1622	NRSAG2J-103X	MG R	10kΩ 1/10W J	*
R1623	NRSAG2J-473X	MG R	47kΩ 1/10W J	*
R1634	NRSAG2J-562X	MG R	5.6kΩ 1/10W J	*
R1635	NRSAG2J-681X	MG P	680Ω 1/10W J	*
R1636-37	NRSAG2J-103X	MG R	10kΩ 1/10W J	*
R1638	NRSAG2J-681X	MG R	680Ω 1/10W J	*
R1639	NRSAG2J-473X	MG R	47kΩ 1/10W J	*
R1640	NRSAG2J-562X	MG R	5.6kΩ 1/10W J	*
R1641	NRSAG2J-102X	MG R	1kΩ 1/10W J	*
R1701-02	NRSAG2J-682X	MG R	6.8kΩ 1/10W J	*
R1703	NRSAG2J-331X	MG R	330Ω 1/10W J	*
R1704	NRSAG2J-102X	MG R	1kΩ 1/10W J	*
R1707-09	NRSAG2J-103X	MG R	10kΩ 1/10W J	*
R1710-12	NRSAG2J-102X	MG R	1kΩ 1/10W J	*
R1713	NRSAG2J-331X	MG P	330Ω 1/10W J	*
R1715-17	NRSAG2J-221X	MG R	220Ω 1/10W J	*
R1718-19	NRSAG2J-102X	MG R	10kΩ 1/10W J	*
R1720	NRSAG2J-102X	MG R	1kΩ 1/10W J	*
R1721	NRSAG2J-392X	MG R	3.9kΩ 1/10W J	*
R1722	NRSAG2J-102X	MG P	1kΩ 1/10W J	*
R1723	NRSAG2J-392X	MG P	3.9kΩ 1/10W J	*
R1724	NRSAG2J-102X	MG P	1kΩ 1/10W J	*
R1725	NRSAG2J-392X	MG P	3.9kΩ 1/10W J	*
R1726	HP2SA2J-822X	MG R	8.2kΩ 1/10W J	*

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1727	NRS402J-472X	MG R	4.7kΩ 1/10W J	*
R1729	NRS402J-104X	MG R	100kΩ 1/10W J	*
R1730	NRS402J-822X	MG R	82kΩ 1/10W J	*
R1731	NRS402J-562X	MG R	56kΩ 1/10W J	*
R1732	NRS402J-822X	MG R	8.2kΩ 1/10W J	*
R1733-34	NRS402J-103X	MG R	10kΩ 1/10W J	*
R1735	NRS402J-223X	MG R	22kΩ 1/10W J	*
R1736	NRS402J-153X	MG R	15kΩ 1/10W J	*
R1737	NRS402J-103X	MG R	10kΩ 1/10W J	*
R1738	NRS402J-274X	MG R	270kΩ 1/10W J	*
R1740	NRS402J-821X	MG R	820Ω 1/10W J	*
R1741	NRS402J-122X	MG R	1.2kΩ 1/10W J	*
R1743	NRS402J-101X	MG R	100Ω 1/10W J	*
R1744	NRS402J-102X	MG R	1kΩ 1/10W J	*
R1745	NRS402J-331X	MG R	330Ω 1/10W J	*
R1747-49	NRS402J-102X	MG R	1kΩ 1/10W J	*
R1751-56	NRS402J-102X	MG R	1kΩ 1/10W J	*
R1759	NRS402J-102X	MG R	1kΩ 1/10W J	*
R1760	NRS402J-821X	MG R	820Ω 1/10W J	*
R1761	NRS402J-103X	MG R	10kΩ 1/10W J	*
R1762	NRS402J-331X	MG R	330Ω 1/10W J	*
R1763	NRS402J-471X	MG R	470Ω 1/10W J	*
R1764	NRS402J-472X	MG R	4.7kΩ 1/10W J	*
R1768-73	NRS402J-472X	MG R	4.7kΩ 1/10W J	*
R1775	NRS402J-221X	MG R	220Ω 1/10W J	*
R1776	NRS402J-273X	MG R	27kΩ 1/10W J	*
R1777-78	NRS402J-103X	MG R	10kΩ 1/10W J	*
R1779	NRS402J-223X	MG R	22kΩ 1/10W J	*
R1780-81	NRS402J-103X	MG R	10kΩ 1/10W J	*
R1782	NRS402J-102X	MG R	1kΩ 1/10W J	*
R1783	NRS402J-473X	MG R	47kΩ 1/10W J	*
R1784-85	NRS402J-102X	MG R	1kΩ 1/10W J	*
R1786-92	NRS402J-221X	MG R	220Ω 1/10W J	*
R1793	NRS402J-104X	MG R	100kΩ 1/10W J	*
R1801	NRS402J-471X	MG R	470Ω 1/10W J	*
R1802-03	NRS402J-102X	MG R	1kΩ 1/10W J	*
R1804	NRS402J-152X	MG R	1.5kΩ 1/10W J	*
R1805	NRS402J-102X	MG R	1kΩ 1/10W J	*
R1808-10	NRS402J-333X	MG R	33kΩ 1/10W J	*
R1811	NRS402J-332X	MG R	3.3kΩ 1/10W J	*
R1812	NRS402J-822X	MG R	8.2kΩ 1/10W J	*
R1813	NRS402J-331X	MG R	330Ω 1/10W J	*
R1814	NRS402J-351X	MG R	390Ω 1/10W J	*
R1815	NRS402J-122X	MG R	1.2kΩ 1/10W J	*
R1819	NRS402J-393X	MG R	39kΩ 1/10W J	*
R1820	NRS402J-102X	MG R	1kΩ 1/10W J	*
R1822	NRS402J-102X	MG R	1kΩ 1/10W J	*
R1823	NRS402J-152X	MG R	1.5kΩ 1/10W J	*
R1824	NRS402J-271X	MG R	270Ω 1/10W J	*
R1825	NRS402J-152X	MG R	1.5kΩ 1/10W J	*
R1826	NRS402J-271X	MG R	270Ω 1/10W J	*
R1827	NRS402J-152X	MG R	1.5kΩ 1/10W J	*
R1828	NRS402J-271X	MG R	270Ω 1/10W J	*
R1801	QRF104K-390	UNF R	3.3Ω 10W K	*
R1902-03	QRE121J-474Y	C R	470kΩ 1/2W J	*
R1904	QRG039J-473	OM R	47kΩ 3W J	*
R1905	QRG039J-333	OM R	33kΩ 3W J	*
R1906	QRE121J-102Y	C R	1kΩ 1/2W J	*
R1907	QRG059J-833	MP R	0.33Ω 5W J	*
R1910	NRS402J-181X	MG R	180Ω 1/10W J	*
R1911	QRE121J-470Y	C R	47Ω 1/2W J	*
R1912	NRS402J-080X	MG R	0.08Ω 1/10W J	*
R1934	NRS402J-562X	MG R	5.6kΩ 1/10W J	*
R1935	NRS402J-102X	MG R	1kΩ 1/10W J	*
R1936	NRS402J-272X	MG R	27kΩ 1/10W J	*
R1937	NRS402J-682X	MG R	6.8kΩ 1/10W J	*
R1938	NRS402J-102X	MG R	1kΩ 1/10W J	*

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1919	NRS402J-332X	MG R	3.3kΩ 1/10W J	*
R1920-21	NRS402J-103X	MG R	10kΩ 1/10W J	*
R1922	NRS402J-224X	MG R	220kΩ 1/10W J	*
R1951	QRF074J-12X	UNF R	1kΩ 7W J	*
R1952	QRL029J-473	OM R	47kΩ 2W J	*
R1953	NRS402J-222X	MG R	2.2kΩ 1/10W J	*
R1954	NRS402J-473X	MG R	47kΩ 1/10W J	*
R1955	NRS402J-103X	MG R	10kΩ 1/10W J	*
R1956	QRX039J-882	MF R	0.82Ω 3W J	*
R1958	NRS402J-220X	MG R	22Ω 1/10W J	*
R1959	NRS402J-822X	MG R	8.2kΩ 1/10W J	*
R1960	NRS402J-470X	MG R	47Ω 1/10W J	*
R1961	NRS402J-562X	MG R	5.6kΩ 1/10W J	*
R1963	NRS402J-183X	MG R	18kΩ 1/10W J	*
R1964	QRG016J-120	OM R	12Ω 1W J	*
R1966	QRG029J-180	OM R	18Ω 2W J	*
R1967	QRG029J-223	OM R	22kΩ 2W J	*
R1968	QRG029J-270	OM R	27Ω 2W J	*
R1969	QRG016J-121	OM R	12Ω 1W J	*
R1991	QRZ0057-825	C R	8.2MΩ 1W J	*
CAPACITOR				
C1001	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1002	NCB21HK-222X	C CAP.	2200pF 50V K	*
C1003	QETN1CM-108Z	E CAP.	1000pF 16V M	*
C1004	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1005	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1006	QETN1CM-107Z	E CAP.	1000pF 16V M	*
C1007-09	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1010	QETN1CM-106Z	E CAP.	1000pF 16V M	*
C1011	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1102-03	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1104	NCB21HK-823X	CHIP CAP.	0.082kΩ 50V K	*
C1105	QETN1HM-475Z	E CAP.	4.7μF 50V M	*
C1107-08	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1109	QETN1CM-108Z	E CAP.	1000pF 16V M	*
C1110	NCB21HK-120X	C CAP.	12pF 50V J	*
C1111	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1112	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1113-15	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1116	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1117	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1118-20	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1121	QETN1HM-475Z	E CAP.	4.7μF 50V M	*
C1122	QETN1CM-107Z	E CAP.	1000pF 16V M	*
C1123	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1124	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1125	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1126	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1127	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1128	NCB21HK-390X	C CAP.	390pF 50V J	*
C1129	NCB21HK-680X	C CAP.	680pF 50V J	*
C1401	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1407	QETN1HM-227Z	E CAP.	220pF 35V M	*
C1408	QETN1CM-107Z	E CAP.	1000pF 16V M	*
C1409	NCB21HK-152X	C CAP.	1500pF 50V J	*
C1410	QETN1HM-108	E CAP.	1000pF 35V M	*
C1412	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1413	QETN1CM-108Z	E CAP.	1000pF 16V M	*
C1416	NCB21HK-152X	C CAP.	1500pF 50V J	*
C1417	QFLC2AJ-563Z	M CAP.	0.056pF 100V J	*
C1418	QFV71HJ-154Z	MF CAP.	0.15μF 50V J	*
C1424	NCB21HK-680X	C CAP.	68pF 50V J	*
C1428	QFLC2AK-104Z	M CAP.	0.1μF 100V K	*
C1461	QFLC1HJ-823Z	M CAP.	0.083pF 50V J	*
C1462	QFV71HJ-184Z	MF CAP.	0.18μF 50V J	*

△ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C1463	QEM61EK-225Z	E CAP.	2.2μF 25V K	*
C1464	QFP31HG-333	CHIP CAP.	0.033μF 50V G	*
C1468	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1469	QETN1HM-121X	C CAP.	120pF 50V J	*
C1470	NCB21HK-331X	C CAP.	330pF 50V J	*
C1471	QETN1CM-228	E CAP.	2200pF 16V M	*
C1472	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1473	QEM61EK-475Z	E CAP.	4.7μF 50V K	*
C1474	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1481	QEHRIHM-106Z	E CAP.	10μF 50V M	*
C1501	QETN1CM-107Z	E CAP.	1000pF 16V M	*
C1502-04	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1505	NCB21HK-822X	C CAP.	8200pF 50V K	*
C1506	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1507	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1509	QEC32HM-681Z	C CAP.	680pF 500V K	*
C1510	QEHCI2CM-105Z	E CAP.	1μF 160V M	*
△ C1521	QFZ012Z-362	MPP CAP.	3.6kΩ±1% 84VH±2.5%	*
△ C1522	QFZ012Z-80101	MPP CAP.	8000pF±1% 50VH±2.5%	*
△ C1523	QFZ32GJ-333	PP CAP.	0.033μF 400V J	*
△ C1524	QFZ0119-474	MPP CAP.	0.47μF 200V ±3%	*
△ C1525	QFZ0194-304	MPP CAP.	0.3μF 250V J	*
C1526	QEHCI2CM-475Z	E CAP.	4.7μF 250V M	*
C1527	QEC32HM-561Z	C CAP.	560pF 500V K	*
C1528	QETN1CM-227	E CAP.	220pF 160V M	*
△ C1531	QFZ0119-304	MPP CAP.	0.2μF 200V ±3%	*
C1552-53	QEH81CM-108	E CAP.	1000pF 25V M	*
C1554	QETN1CM-106Z	E CAP.	10μF 50V M	*
C1555	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1581	QETN1HM-107Z	E CAP.	100pF 10V M	*
C1582	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1583	QETN1CM-106Z	E CAP.	10μF 100V M	*
C1584	QETN1CM-227Z	E CAP.	220pF 10V M	*
C1602-03	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1604	QETN1HM-107Z	E CAP.	100pF 50V M	*
C1605	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1606-09	NCB21HK-224X	C CAP.	0.22μF 50V Z	*
C1610	QETN1HM-108	E CAP.	1000pF 35V M	*
C1612	QETN1HM-108	E CAP.	1000pF 35V M	*
C1615	QETN1CM-227Z	E CAP.	220pF 16V M	*
C1616	QETN1HM-228	E CAP.	2200pF 50V M	*
C1620	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1630	QETN1CM-227Z	E CAP.	220pF 16V M	*
C1631	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1633	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1636-37	NCB21HK-105X	C CAP.	1μF 16V Z	*
C1638-39	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1701	QETN1HM-108Z	E CAP.	1000pF 25V M	*
C1702	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1703	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1704	QETN1CM-227Z	E CAP.	220pF 16V M	*
C1705	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1706	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1707	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1709	NCB21HK-680X	C CAP.	680pF 50V J	*
C1711	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1712	QETN1HM-107Z	E CAP.	100pF 10V M	*
C1713	NCB21HK-220X	C CAP.	22pF 50V J	*
C1714	NCB21HK-473X	C CAP.	470pF 50V J	*
C1715	NCB21HK-333X	C CAP.	0.033μF 50V K	*
C1716	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1718	NCB21HK-560X	C CAP.	56pF 50V J	*
C1719	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1720	QETN1HM-105Z	BP E CAP.	1μF 50V M	*
C1721	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1730	NCB21HK-105X	C CAP.	1μF 16V Z	*
C1731	NCB21HK-821X	C CAP.	820pF 50V J	*

△	Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR					
	C1807	QETN1CM-476Z	E CAP.	47μF 16V M	*
	C1809	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C1811	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C1812	QETN1CM-107Z	E CAP.	1000pF 16V M	*
	C1813	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C1814	NCB21HK-103X	C CAP.	0.01μF 50V K	*
	C1815	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
	C1816	QETN1HM-226Z	E CAP.	22pF 50V M	*
	C1817	NCB21HK-103X	C CAP.	0.01μF 50V K	*
	C1818	NCB21HK-223X	C CAP.	0.022μF 50V K	*
	C1819	NCB21HM-221X	C CAP.	220pF 50V J	*
	C1820-21	NCB21HM-505X	C CAP.	15pF 50V J	*
	C1822	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
	C1823-24	NCB21HK-102X	C CAP.	1000pF 50V K	*
	C1825	NCB21HM-221X	C CAP.	220pF 50V J	*
	C1826	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
	C1827	QETN0JM-477Z	E CAP.	470μF 6.3V M	*
	C1828-29	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
△	C1901	QCZ9054-47Z	C CAP.	4700pFAC250V Z	*
△	C1902	QCZ9054-47Z	C CAP.	4700pFAC250V Z	*
△	C1903	QCZ9054-47Z	C CAP.	4700pFAC250V Z	*
	C1904	QEZ0195-227	E CAP.	220pF 400V M	*
	C1905	QC829K-103X	C CAP.	0.01μF 500V K	*
	C1906	QCZ0122-391	C CAP.	390pF 2000V K	*
	C1908	QCZ0122-221	C CAP.	220pF 2000V K	*
	C1909	QCZ0122-391	C CAP.	390pF 2000V K	*
	C1911	NC521HK-104X	CHIP CAP.	0.1μF 25V M	*
	C1912	QETN1EM-107Z	E CAP.	100pF 25V M	*
	C1913	NCB21HK-102X	C CAP.	1000pF 50V K	*
	C1914	NC521HM-101X	C CAP.	1000pF 50V J	*
	C1915	NCB21HM-821X	E CAP.	820pF 50V J	*
	C1916	QETN1HM-105Z	E CAP.	1μF 50V M	*
	C1917	NCB21HK-102X	C CAP.	1000pF 50V K	*
	C1918	QCZ0131-561	C CAP.	390pF 2000V K	*
	C1919-53	QCZ0132-102Z	C CAP.	1000pF 500V K	*
	C1922	QCZ0135-101Z	C CAP.	100pF 1000V K	*
	C1925	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
	C1926	QCZ0203-227	E CAP.	220pF 360V M	*
	C1927	QCZ0257-228	E CAP.	2200pF 25V M	*
	C1929	QEH91EM-108Z	E CAP.	1000pF 25V M	*
	C1962	QEH91CM-477Z	E CAP.	470μF 16V M	*
	C1965	QEH91VM-108	E CAP.	1000pF 35V M	*
	C1966	NCB21HM-473X	C CAP.	0.047μF 50V K	*
	C1972	OPV71JM-684Z	MF CAP.	0.68μF 50V J	*
	C1973	QC832HM-392Z	C CAP.	3900pF 500V K	*
	C1974-75	NCB21HM-104X	CHIP CAP.	0.1μF 50V K	*
	C1976	QETN1CM-227Z	E CAP.	220pF 16V M	*
	C1977	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
	C1978	QEH91CM-227Z	E CAP.	220pF 16V M	*
	C1979	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
	C1980	QEH91AM-227Z	E CAP.	220pF 10V M	*
	C1981	QETN1CM-227Z	E CAP.	220pF 16V M	*
△	C1992	QCZ9079-471	C CAP.	4700pFAC250V K	*
△	C1993	QCZ9079-33Z	C CAP.	3300pFAC250V K	*
	C1994	NCB21HK-103X	C CAP.	0.01μF 50V K	*
TRANSFORMER					
	T1501	C64204-002	H. DRIVE TRANSF.		*
	T1511	CF42549-00111	BRIDGE COIL		*
△	T1901	CE15121-0011C	SW TRANSF.		*
COIL					
	L1001	QO-318K-270Z	COIL	27μH	*

△ Symbol No.	Part No.	Part Name	Description	Local
COIL				
L1006	QOL018K-586Z	COIL	5.6μH	*
L1010	QOL018K-586Z	COIL	5.6μH	*
L1101	QOL018K-221Z	COIL	220μH	*
L1102	QOL018K-4R7Z	COIL	4.7μH	*
L1103	QOL018K-330Z	COIL	33μH	*
L1461	CE42567-001J1	INJECTION COIL		*
L1532	CELL001-001J2	LINEARITY COIL		*
L1553	QOL018-800	HEATER CHOKO		*
L1701	QOL018K-8R2Z	COIL	8.2μH	*
L1702	QOL018K-221Z	COIL	220μH	*
L1801	QOL018K-3R3Z	COIL	3.3μH	*
L1802	QOL018K-4R7Z	COIL	4.7μH	*
L1901	QOL26AM-2R7Z	CHOKO COIL		*
L1951	QOL2018-460	HEATER CHOKO		*
L1954	QOL26AK-220Z	COIL	22μH	*
L1958	QOL26AM-586Z	CHOKO COIL		*
L1960-61	QOL26AM-586Z	CHOKO COIL		*

DIODE				
D1101	MA111-X	SI DIODE		*
D1402	1N4003-T2	SI DIODE		*
D1461	MA3035/H-X	ZENER DIODE		*
D1462	MA3120/M-X	ZENER DIODE		*
D1463-64	MA3220/M-X	ZENER DIODE		*
D1481	MA111-X	SI DIODE		*
D1482	MA3220/M-X	ZENER DIODE		*
D1501	MA3081/M-X	ZENER DIODE		*
D1521	BY228-Z0	SI DIODE		*
D1522	BYW95B-Z0	SI DIODE		*
D1523	BYD330-T3	SI DIODE		*
D1551-52	BYW95B-Z0	SI DIODE		*
D1553-54	BYD330-T3	SI DIODE		*
D1555	BYD330-T3	SI DIODE		*
D1581	MA3150/M-X	ZENER DIODE		*
D1582	MA3075/M-X	CHIP ZENER DIODE		*
D1583	BYD330-T3	SI DIODE		*
D1584	MTZ17-5S-T2	ZENER DIODE		*
D1601-62	MA3330/L-X	ZENER DIODE		*
D1604	MA153A-X	SI DIODE		*
D1605	MA111-X	SI DIODE		*
D1606	MA153A-X	SI DIODE		*
D1608	MA111-X	SI DIODE		*
D1609	MA152W-X	SI DIODE		*
D1613	MA111-X	SI DIODE		*
D1615	MA111-X	SI DIODE		*
D1701-62	MA704A-Y	SI DIODE		*
D1708-11	MA111-X	SI DIODE		*
D1715	MA111-X	SI DIODE		*
D1716	MA3066/M-X	ZENER DIODE		*
D1801-02	MA111-X	SI DIODE		*
△ D1901	D358A60	DIODE BRIDGE		*
D1902	BYD330-T3	SI DIODE		*
D1903	BYD330-T3	SI DIODE		*
D1951	RU4B-P1	SI DIODE		*
D1952-53	BYD330-T3	SI DIODE		*
D1954	MC821-6	THYRISTOR		*
D1955	15R35-400A-T2	SI DIODE		*
D1956	BYD330-T3	SI DIODE		*
D1957-58	BYW95B-Z0	SI DIODE		*
D1959	SF6L20H	SI DIODE		*
D1962	MTZ158-T2	ZENER DIODE		*
D1964	MA3150/M-X	ZENER DIODE		*
D1965	MA3075/H-X	ZENER DIODE		*
D1966	MA3330/L-X	ZENER DIODE		*
D1967	MA3051/M-X	ZENER DIODE		*
D1980-82	MA111-X	SI DIODE		*
D1983	MTZ120-T2	ZENER DIODE		*

△ Symbol No.	Part No.	Part Name	Description	Local
DIODE				
D1984	15R35-400A-T2	SI DIODE		*
TRANSISTOR				
Q1101	2SA116Z/YG-X	SI TRANSISTOR		*
Q1103	DTC144EKA-X	DIGI TRANSISTOR		*
Q1461-64	2SC2712/YG-X	SI TRANSISTOR		*
Q1465	2SD1408/YG-X	SI TRANSISTOR		*
Q1481-82	2SC2712/YG-X	SI TRANSISTOR		*
Q1501	8SK274	F.E.T.		*
△ Q1521	B02508AX	POWER TRANSISTOR	H. OUT	*
Q1531	2SK2459N-F54	POWER MOS FET		*
Q1532	DTC124EKA-X	DIGI TRANSISTOR		*
Q1581	2SA949/Y/TZ1	SI TRANSISTOR		*
Q1582	DTC124EKA-X	DIGI TRANSISTOR		*
Q1583	2SC2712/YG-X	SI TRANSISTOR		*
Q1601	2SC2712/YG-X	SI TRANSISTOR		*
Q1602	2SA116Z/YG-X	SI TRANSISTOR		*
Q1603-04	DTC323TK-X	DIGI TRANSISTOR		*
Q1605-06	2SA116Z/YG-X	SI TRANSISTOR		*
Q1607-08	DTC323TK-X	DIGI TRANSISTOR		*
Q1610-11	2SA116Z/YG-X	SI TRANSISTOR		*
Q1701-06	2SC2712/YG-X	SI TRANSISTOR		*
Q1767	2SA116Z/YG-X	SI TRANSISTOR		*
Q1801	2SA116Z/YG-X	SI TRANSISTOR		*
Q1802	DTC124EKA-X	DIGI TRANSISTOR		*
Q1806-07	2SC2712/YG-X	SI TRANSISTOR		*
Q1901	MTA960E	F.E.T.		*
Q1951	2SC2712/YG-X	SI TRANSISTOR		*
Q1952-53	DTC124EKA-X	DIGI TRANSISTOR		*

IC				
IC1101	T81227AH	I.C. (DIGI-OTHER)		*
IC1401	LA7841	I.C. (MONO-ANA)		*
IC1461	TAB859CP	I.C. (MONO-ANA)		*
IC1601	TAB1461	I.C.		*
IC1701	M37207H6-1555P	I.C. (MICRO-COMP)		*
IC1702	L78L05E-MA	I.C. (MONO-ANA)		*
IC1703	AT24C1625T54EN	I.C.	(SERVICE)	*
IC1801	TC4053BP/NV	I.C.		*
IC1804	CF70206	I.C. (DIGI-MOS)		*
IC1805	CF72417	I.C. (DIGI-MOS)		*
IC1901	MC44604P	I.C. (MONO-ANA)		*
IC1951	BA137	I.C.		*
IC1952	AN7809P	I.C. (MONO-ANA)		*
IC1953	AN7805P	I.C. (MONO-ANA)		*
IC1954	SE135N	I.C. (HYBRID)		*

OTHERS				
CN1005	CM48279-001-E	SHIELD PLATE		*
△ CN1951	CHC108N-2ST-AE	FFC CONNECTOR		*
△ CP1952	ICF-N50-Y	I.C. PROTECT		*
△ CP1955	ICF-N30-Y	I.C. PROTECT		*
J1001	QW0296-001	PIN JACK		*
K1001	CE41433-001Z	BEADS CORE		*
K1002-03	CE42681-001Y	BEADS CORE		*
K1005	CF41433-001Z	BEADS CORE		*
K1402	CE42433-001Z	BEADS CORE		*
K1403	CF42681-001Y	BEADS CORE		*
K1501-02	CE42681-001Y	BEADS CORE		*
K1901	QOR0872-001Y	FERRITE BEADS		*
K1905	QOR0872-001Y	FERRITE BEADS		*
K1951	QOR0872-001Y	FERRITE BEADS		*
K1953-55	CE41433-001Z	BEADS CORE		*
PC1531	TLCP21F(8)	I.C. (PH. COUPLER)		*

△ Symbol No.	Part No.	Part Name	Description	Local
OTHERS				
△ PC1901	TLP721F(04-GR)	I.C. (PH. COUPLER)		*
TU1001	CEEK481-B04	TUNER		*
X1101	QW0305-001Z	CRYSTAL		*
X1701	CST8-00MTW	CER. RESONATOR		*
X1801	CE41257-001Z	CRYSTAL		*
Y1463	NRS402J-0R0X	MG R	0.002 1/10W J	*
Y1603	NRS402J-0R0X	MG R	0.002 1/10W J	*
Y2605-07	NRS402J-0R0Y	MG R	0.002 1/10W J	*
Y1801-02	NRS402J-0R0X	MG R	0.002 1/10W J	*
Y1555	NRS402J-0R0X	MG R	0.002 1/10W J	*
Y1557	NRS402J-0R0X	MG R	0.002 1/10W J	*

CRT SOCKET P.W. BOARD ASS'Y (SJH-3001A-U2)

Refer to PARTS LIST in page 40 for this P.W. board.

FRONT CONTROL P.W. BOARD ASS'Y (SJH-8002A-U2)

Refer to PARTS LIST in page 41 for this P.W. board.

IF P.W. BOARD ASS'Y (SJH0F701A-U2)

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R0020	NRS402J-472X	MG R	4.7kΩ 1/10W J	*
R0021	NRS402J-122X	MG R	1.2kΩ 1/10W J	*
R0022	NRS402J-332X	MG R	330Ω 1/10W J	*
R0023	NRS402J-101X	MG R	100Ω 1/10W J	*
R0024	NRS402J-0R0X	MG R	0.002 1/10W J	*
R0025	NRS402J-222X	MG R	2.2kΩ 1/10W J	*
R0026	NRS402J-122X	MG R	1.2kΩ 1/10W J	*
R0027-28	NRS402J-0R0Y	MG R	0.002 1/10W J	*
R0030-31	NRS402J-150X	MG R	150Ω 1/10W J	*
R0030-51	NRS402J-121X	MG R	120Ω 1/10W J	*
R0052-53	NRS402J-561X	MG R	560Ω 1/10W J	*
R0057	NRS402J-472X	MG R	4.7kΩ 1/10W J	*
R0058	NRS402J-272X	MG R	2.7kΩ 1/10W J	*
R0059	NRS402J-273X	MG R	27kΩ 1/10W J	*
R0060-61	NRS402J-471X	MG R	470Ω 1/10W J	*
R0062	NRS402J-102X	MG R	1kΩ 1/10W J	*
R0063	NRS402J-822X	MG R	8.2kΩ 1/10W J	*
R0064	NRS402J-0R0X	MG R	0.002 1/10W J	*
R0065	NRS402J-470X	MG R	470Ω 1/10W J	*
R0071	NRS402J-393X	MG R	39kΩ 1/10W J	*
R0080-81	NRS402J-473X	MG R	47kΩ 1/10W J	*
R0082	NRS402J-272X	MG R	2.7kΩ 1/10W J	*
R0101	NRS402J-822X	MG R	8.2kΩ 1/10W J	*
R0102	NRS402J-471X	MG R	470Ω 1/10W J	*

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R0103	NRS402J-102X	MG R	1kΩ 1/10W J	*
R0104	NRS402J-121X	MG R	120Ω 1/10W J	*
R0105	NRS402J-351X	MG R	350Ω 1/10W J	*
R0106	NRS402J-331X	MG R	330Ω 1/10W J	*
R0107	NRS402J-221X	MG R	220Ω 1/10W J	*
R0108	NRS402J-102X	MG R	1kΩ 1/10W J	*
R0109	NRS402J-181X	MG R	180Ω 1/10W J	*
R0110	NRS402J-222X	MG R	2.2kΩ 1/10W J	*
R0113	NRS402J-0R0X	MG R	0.002 1/10W J	*
R0114	NRS402J-471X	MG R	470Ω 1/10W J	*
R0115	NRS402J-332X	MG R	3.3kΩ 1/10W J	*
R0116	NRS402J-561X	MG R	560Ω 1/10W J	*
R0117	NRS402J-332X	MG R	3.3kΩ 1/10W J	*
R0120-24	NRS402J-103X	MG R	10kΩ 1/10W J	*
R0140	NRS402J-474X	MG R	470kΩ 1/10W J	*
R0141	NRS402J-101X	MG R	100Ω 1/10W J	*
R0142	NRS402J-391X	MG R	390Ω 1/10W J	*
R0143	NRS402J-750X	MG R	750Ω 1/10W J	*
R0144	NRS402J-684X	MG R	680Ω 1/10W J	*
R0145	NRS402J-332X	MG R	3.3kΩ 1/10W J	*
R0146	NRS402J-104X	MG R	10kΩ 1/10W J	*
R0601	NRS402J-822X	MG R	8.2kΩ 1/10W J	*
R0602	NRS402J-102X	MG R	1kΩ 1/10W J	*
R0603	NRS402J-104X	MG R	10kΩ 1/10W J	*
R0604	NRS402J-663X	MG R	66kΩ 1/10W J	*
R0605-06	NRS402J-392X	MG R	3.9kΩ 1/10W J	*
R0607-08	NRS402J-562X	MG R	5.6kΩ 1/10W J	*
△ R0609	QR29017-470	FUSI. RESISTOR	47 Ω 1/4W J	*

CAPACITOR

C0020	NCB21HK-472X	C CAP.	4700pF	50V K	*
C0022-25	NCB21HK-472X	C CAP.	4700pF	50V K	*
C0030	NCB21HK-472X	C CAP.	4700pF	50V K	*
C0040	NCB21HK-102X	C CAP.	1000pF	50V K	*
C0041	QETN1CM-107Z	E CAP.	100μF	16V M	*
C0042	NCB21HK-103X	C CAP.	0.01μF	50V K	*
C0043	QETN1CM-107Z	E CAP.	100μF	16V M	*
C0044	NCB21HK-103X	C CAP.	0.01μF	50V K	*
C0045	NCB21HK-472X	C CAP.	4700pF	50V K	*
C0046	NCB21HK-103X	C CAP.	0.01μF	50V K	*
C0047	QETN1CM-227Z	E CAP.	220μF	16V M	*
C0050	QETN1CM-105Z	E CAP.	1μF	50V K	*
C0051	NCB21HK-472X	C CAP.	4700pF	50V K	*
C0053	NCB21HK-680X	C CAP.	6.8pF	50V J	*
C0054	NCB21HK-103X	C CAP.	0.01μF	50V K	*
C0055	QETN1CM-107Z	E CAP.	100μF	16V M	*
C0056	QETN1HM-474Z	E CAP.	0.47μF	50V M	*
C0057	NCB21HK-102X	C CAP.	1000pF	50V J	*
C0058	NCB21HK-472X	C CAP.	4700pF	50V K	*
C0060	NCB21HK-120X	C CAP.	120pF	50V J	*
C0061	NCB21HK-780X	C CAP.	7.8pF	50V J	*
C0062	QETN1HM-474Z	E CAP.	0.47μF	50V M	*
C0065	NCB21HK-103X	C CAP.	0.01μF	50V K	*
C0064	NCB21HK-472X	C CAP.	4700pF	50V K	*
C0065	QETN1HM-105Z	E CAP.	1μF	50V M	*
C0067	NCB21HK-120X	C CAP.	120pF	50V J	*
C0068-70	NCB21HK-103X	C CAP.	0.01μF	50V K	*
C0071	QETN1HM-336Z	E CAP.	33μF	50V M	*
C0080-81	NCB21HK-472X	C CAP.	4700pF	50V K	*
C0101	QETN1CM-476Z	E CAP.	47μF	16V M	*
C0102	NCB21HK-221X	C CAP.	220pF	50V J	*
C0103	NCB21HK-121X	C CAP.	120pF	50V J	*
C0105	NCB21HK-103X	C CAP.	0.01μF	50V K	*
C0140	QETN1HM-335Z	E CAP.	3.3μF	50V M	*
C0161	NCB21HK-332X	C CAP.	330pF	50V K	*
C0142	QETN1HM-105Z	E CAP.	1μF	50V M	*

Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C0143	QFLC1HJ-6632	M CAP.	0.068uF 50V J	*
C0144	QETN1HM-3352	E CAP.	3.3uF 50V M	*
C0145	NCB21HK-222X	C CAP.	2200pF 50V K	*
C0601	QFLC1HJ-1832	M CAP.	0.018uF 50V J	*
C0602	QETN1CM-4762	E CAP.	47uF 16V M	*
C0603	QETN1HM-1062	E CAP.	10uF 50V M	*
C0604	QETN1HM-1052	E CAP.	1uF 50V M	*
C0605	QETN1CM-4772	E CAP.	470uF 16V M	*
C0606	NCB21HK-103X	C CAP.	0.01uF 50V K	*
TRANSFORMER				
T0020	QQR0626-001	I.F. TRANSF.		*
T0050	CEL7001-307	C. WAVE. TRANSF.		*
T0051	CEL7001-306	C. WAVE. TRANSF.		*
COIL				
L0020	QQL2014-R47	PEAKING COIL	0.47uH	*
L0021	NQL011K-1R5X	COIL	1.5uH	*
L0030	NQL011K-2R2X	COIL	2.2uH	*
L0040	NQL011K-120X	COIL	12uH	*
L0042	NQL011K-330X	COIL	33uH	*
L0050-53	NQL011K-8R2X	COIL	8.2uH	*
L0054	NQL011K-330X	COIL	33uH	*
L0070	NQL011K-5R6X	COIL	5.6uH	*
L0101	NQL011K-6R8X	COIL	6.8uH	*
L0102	NQL021K-100X	COIL	10uH	*
L0103	NQL011K-8R2X	COIL	8.2uH	*
DIODE				
D0020-21	DAN235K-X	CHIP DIODE		*
D0050-51	DAN235K-X	CHIP DIODE		*
TRANSISTOR				
Q0012	2SC5083/L-P/-T	SI. TRANSISTOR		*
Q0080	2SC2712/YG/-X	SI. TRANSISTOR		*
Q0101	2SC2712/YG/-X	SI. TRANSISTOR		*
Q0102	2SA1162/YG/-X	SI. TRANSISTOR		*
Q0103	DTC144EKA-X	DIGI. TRANSISTOR		*
Q0104	2SC2712/YG/-X	SI. TRANSISTOR		*
Q0106	2SC2712/YG/-X	SI. TRANSISTOR		*
Q0107	2SA1162/YG/-X	SI. TRANSISTOR		*
Q0108	DTC144EKA-X	DIGI. TRANSISTOR		*
Q0110-11	2SC2712/YG/-X	SI. TRANSISTOR		*
Q0120-26	DTC144EKA-X	DIGI. TRANSISTOR		*
Q0601-02	2SC2712/YG/-X	SI. TRANSISTOR		*
I.C.				
IC0010	TA8865BN	I.C.(MONO-ANA)		*
OTHERS				
CF0010-11	FTP40.40MF	CERAMIC FILTER		*
CF0100	TP55.5MW	CERAMIC FILTER		*
CF0140	CSB503F30-T2	CER. RESONATOR		*
R0070	NRS402J-393X	MG R	39kΩ 1/10W J	*
SF0010	QAK0531-001	SAW FILTER		*
SF0011	CE42574-702	SAW FILTER		*
SF0012	QAK0352-003	SAW FILTER		*
VC0052	QA77004-100		10pF	*

Symbol No.	Part No.	Part Name	Description	Local
OTHERS				
VC0059	QA77004-100		10pF	*
W0008	NRS402J-DR0X	MG R	0.00 1/10W J	*
W0013	NRS402J-DR0X	MG R	0.00 1/10W J	*
W0015	NRS402J-DR0X	MG R	0.00 1/10W J	*
W0025-26	NRS402J-DR0X	MG R	0.00 1/10W J	*
W0038-29	NRS402J-DR0X	MG R	0.00 1/10W J	*
W0051-32	NRS402J-DR0X	MG R	0.00 1/10W J	*
W0055-36	NRS402J-DR0X	MG R	0.00 1/10W J	*
W0044	NRS402J-DR0X	MG R	0.00 1/10W J	*
W0073-75	NRS402J-DR0X	MG R	0.00 1/10W J	*
W0094-99	NRS402J-DR0X	MG R	0.00 1/10W J	*
Y0001	NRS402J-DR0X	MG R	0.00 1/10W J	*

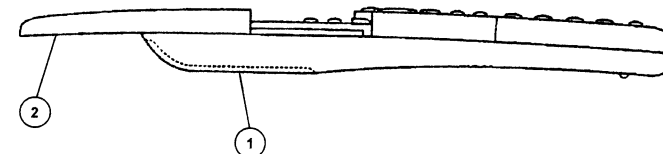
AV SEL & MSP P.W. BOARD ASS'Y (SJH0S001A-U2)

Refer to PARTS LIST in page 42 for this P.W. board.

AV-25TS4EE / AV-25TS4EN / AV-25TS4EP

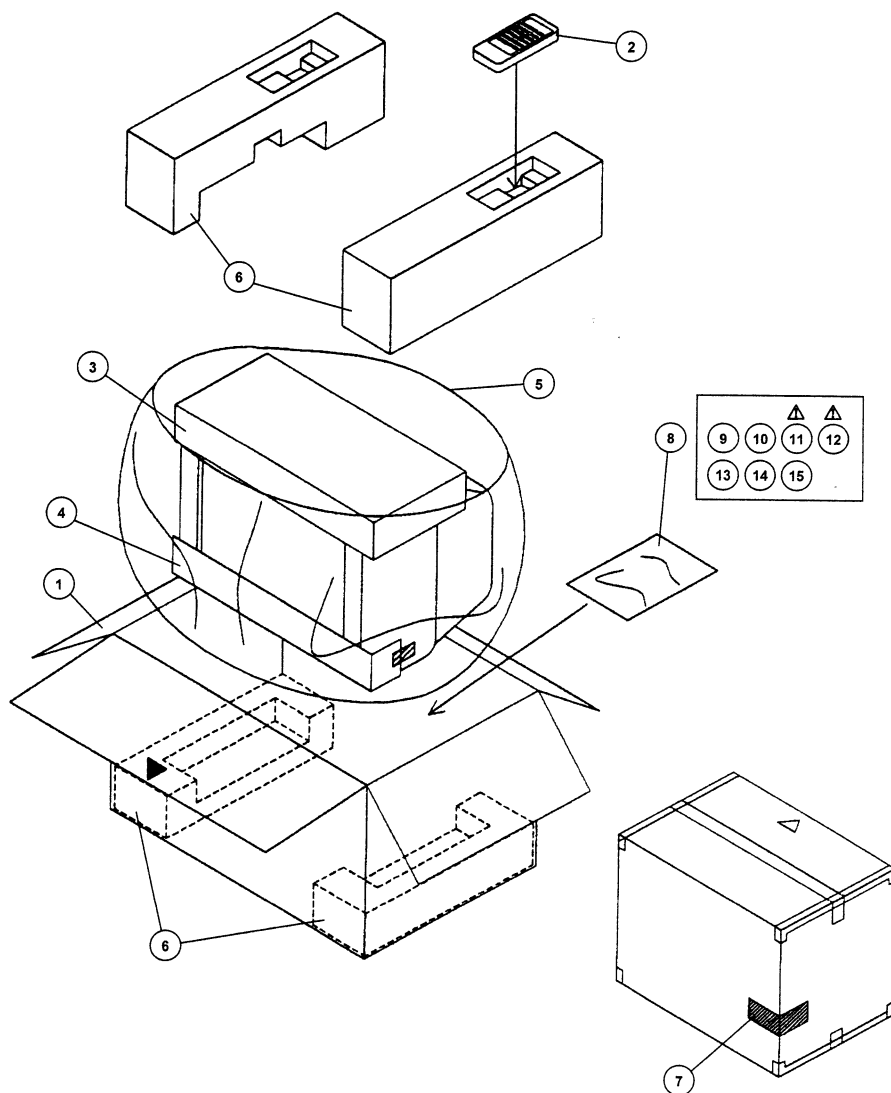
REMOTE CONTROL UNIT PARTS LIST (RM-C795-1E)

Ref.No.	Part No.	Part Name	Description	Local
1	BGV110201A	BATTERY COVER		
2	BGV110303A	SLIDE COVER		



AV-25TS4EE / AV-25TS4EN / AV-25TS4EP

PACKING



PACKING PARTS LIST

AV-25TS4EE

Ref. No.	Part No.	Part Name	Description	Local
1	AEM1002-B38-E	PACKING CASE		*
2	RM-C795-1E	REMOCON UNIT		*
3	CP40193-009-E	CUSHION SHEET		*
4	CP40193-010-E	CUSHION SHEET		*
5	AEM1004-004-E	SET COVER		*
6	CP11497-00B-E	PACKING CUSHION	4pcs in 1set	*
7	AEM1038-047-E	EURO LABEL		*
8	AEM3021-001-E	POLY BAG		*
9	LC30671-001A-U	WARNING LABEL		*
11	LCT0300-001A-U	INST. BOOK		*

AV-25TS4EN

1	AEM1002-B38-E	PACKING CASE		*
2	RM-C795-1E	REMOCON UNIT		*
3	CP40193-009-E	CUSHION SHEET		*
4	CP40193-010-E	CUSHION SHEET		*
5	AEM1004-004-E	SET COVER		*
6	CP11497-00B-E	PACKING CUSHION	4pcs in 1set	*
7	AEM1039-018-E	EURO LABEL		*
8	AEM3021-001-E	POLY BAG		*
10	LC10102-007A-U	X-RAY CARD		*
11	LCT0297-001A-U	INST BOOK	For GBR/GER/FRA/NED/ITA/ESP	*
12	LCT0298-001A-U	INST BOOK	For FIN/NOR/DEN/SWE/POR	*
13	25TS4EN-HSAE	S. DIAGRAM	ONLY ITALY (SERVICE)	*
14	BT-20066A-E	ADDRESS CARD	(1295)	*
15	BT-54008-1E	WARRANTY CARD		*

AV-25TS4EP

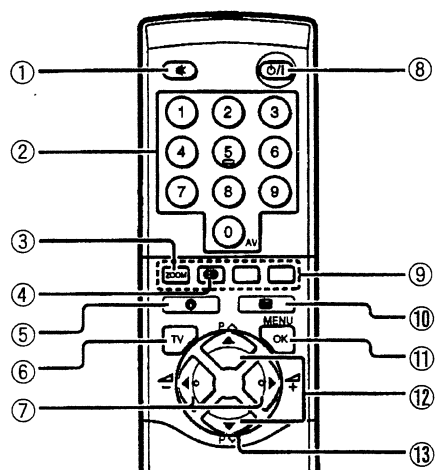
1	AEM1002-B38-E	PACKING CASE		*
2	RM-C795-1E	REMOCON UNIT		*
3	CP40193-009-E	CUSHION SHEET		*
4	CP40193-010-E	CUSHION SHEET		*
5	AEM1004-004-E	SET COVER		*
6	CP11497-00B-E	PACKING CUSHION	4pcs in 1set	*
7	AEM1039-019-E	EURO LABEL		*
8	AEM3021-001-E	POLY BAG		*
11	LCT0299-001A-U	INST BOOK		*
14	BT-20066A-E	ADDRESS CARD	(1295)	*
15	BT-54008-1E	WARRANTY CARD		*

MEMO

MEMO

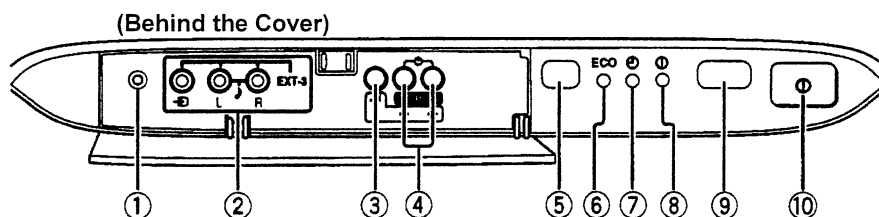
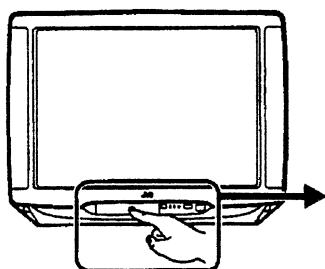
FUNCTIONS

REMOTE CONTROL UNIT



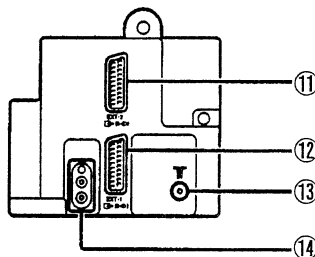
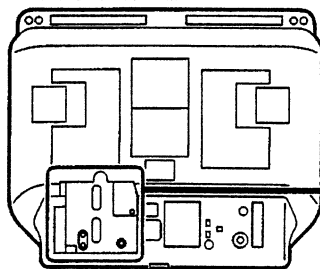
- ① Muting
- ② Number Buttons
- ③ ZOOM
- ④ Hyper Sound
- ⑤ Information
- ⑥ TV
- ⑦ Volume +/-
- ⑧ Standby
- ⑨ Colour Buttons
- ⑩ TEXT
- ⑪ OK / MENU
- ⑫ PR Channel \wedge/\vee
- ⑬ $\blacktriangleleft/\blacktriangleright$ / $\blacktriangledown/\blacktriangleup$

FRONT PANEL



- ① Headphone (Mini jack)
- ② EXT-3 Terminals
- ③ Volume \blacktriangleleft
- ④ \wedge/\vee (PR Channel), +/- (Volume)
- ⑤ ECO Sensor
- ⑥ Remote Control Sensor
- ⑦ ECO Lamp
- ⑧ Sleep Timer Lamp
- ⑨ Power Lamp
- ⑩ Main Power Button

REAR PANEL



- ⑪ EXT-2 Terminal
- ⑫ EXT-1 Terminal
- ⑬ Aerial Socket
- ⑭ Audio Out

AV-25TS4EE AV-25TS4EN STANDARD CIRCUIT DIAGRAM AV-25TS4EP

■ NOTE ON USING CIRCUIT DIAGRAMS

1. SAFETY

The components identified by the Δ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2. SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

- (1) Input signal : Color bar signal
 - (2) Setting positions of each knob/button and variable resistor : Original setting position when shipped
 - (3) Internal resistance of tester : DC 20k Ω /V
 - (4) Oscilloscope sweeping time : H \Rightarrow 20 μ S/div
: V \Rightarrow 5mS/div
: Others \Rightarrow Sweeping time is specified
 - (5) Voltage values : All DC voltage values
- * Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3. INDICATION OF PARTS SYMBOL [EXAMPLE]

- In the PW board : R1209 \rightarrow R209

4. INDICATIONS ON THE CIRCUIT DIAGRAM

(1) Resistors

● Resistance value

- No unit : [Ω]
- K : [K Ω]
- M : [M Ω]

● Rated allowable power

- No indication : 1/10[W]
- Others : As specified

● Type

- No indication : Carbon resistor
- OMR : Oxide metal film resistor
- MFR : Metal film resistor
- MPR : Metal plate resistor
- UNFR : Uninflamable resistor
- FR : Fusible resistor

*Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2) Capacitors

● Capacitance value

- 1 or higher : [pF]
- less than 1 : [μ F]

● Withstand voltage

- No indication : DC50[V]
- AC indicated : AC withstand voltage [V]
- Others : DC withstand voltage [V]

*Electrolytic Capacitors

47/50[Example]:Capacitance value [μ F]/withstand voltage[V]

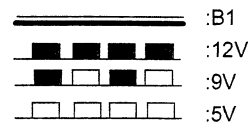
● Type

- No indication : Ceramic capacitor
- MY : Mylar capacitor
- MM : Metalized mylar capacitor
- PP : Polypropylene capacitor
- MPP : Metalized polypropylene capacitor
- MF : Metalized film capacitor
- TF : Thin film capacitor
- BP : Bipolar electrolytic capacitor
- TAN : Tantalum capacitor

(3) Coils

- No unit : [μ H]
- Others : As specified

(4) Power Supply



*Respective voltage values are indicated

(5) Test point

- : Test point
- : Only test point display

(6) Connecting method

- : Connector
- : Wrapping or soldering
- : Receptacle

(7) Ground symbol

- : LIVE side ground
- : ISOLATED(NEUTRAL) side ground
- : EARTH ground
- : DIGITAL ground

5. NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (\perp) side GND and the ISOLATED(NEUTRAL) : (\perp) side GND. Therefore, care must be taken for the following points.

- (1) Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.
- (2) Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

◇ Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

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PATTERN DIAGRAMS

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- AV SEL & MSP PWB PATTERN
- IF PWB PATTERN [For EE, EN Model]
- IF PWB PATTERN [For EP Model]
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- FRONT CONTROL PWB PATTERN

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SEMICONDUCTOR SHAPES

TRANSISTOR					TOP VIEW
BOTTOM VIEW	FRONT VIEW				CHIP TR

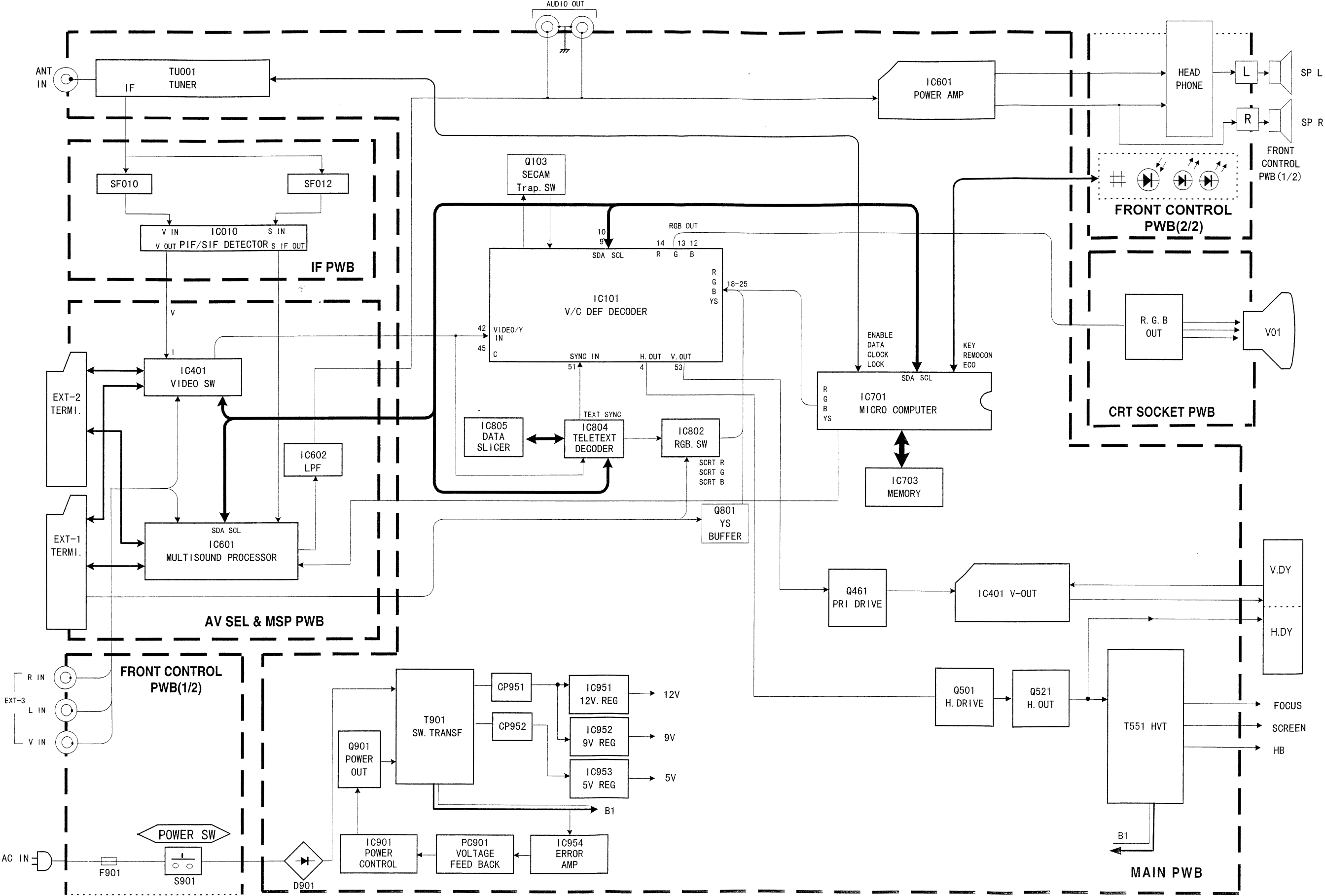
IC				TOP VIEW
BOTTOM VIEW	FRONT VIEW			

CHIP IC		TOP VIEW

BLOCK DIAGRAM

AV-25TS4EE
AV-25TS4EN
AV-25TS4EP

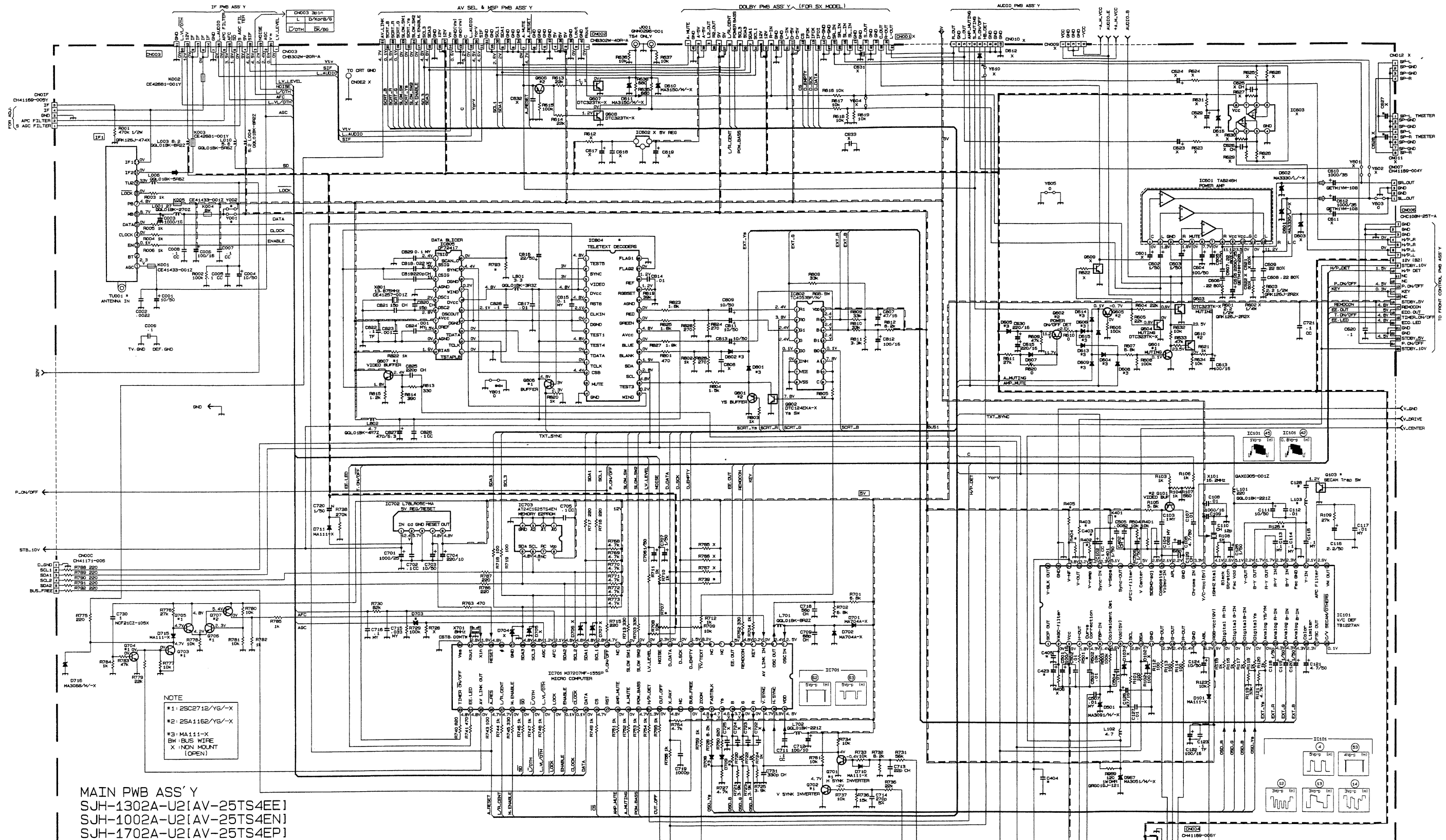
AV-25TS4EE
AV-25TS4EN
AV-25TS4EP



CIRCUIT DIAGRAMS MAIN PWB CIRCUIT DIAGRAM

AV-25TS4EE
AV-25TS4EN
AV-25TS4EP

AV-25TS4EE
AV-25TS4EN
AV-25TS4EP



DIFFERENCE LIST (#PARTS)

#	SJH-1302A-U2[AV-25TS4EE]	SJH-1002A-U2[AV-25TS4EN]	SJH-1702A-U2[AV-25TS4EP]
R401	5K	5K	5K
R402	10K	10K	10K
R403	5K	5K	5K
R404	18K	18K	18K
R405	22K	22K	22K
D703	X	X	X
IC804	2702008	2702011	2702006
R793	100K	100K	100K
R801	500	500	500
C423	X	X	X
R707	X	X	X
R739	X	X	X

#	SJH-1302A-U2[AV-25TS4EE]	SJH-1002A-U2[AV-25TS4EN]	SJH-1702A-U2[AV-25TS4EP]
R402	10K	10K	10K
R403	5K	5K	5K
R404	18K	18K	18K
R405	22K	22K	22K
D703	X	X	X
IC804	2702008	2702011	2702006
R793	100K	100K	100K
R801	500	500	500
C423	X	X	X
R707	X	X	X
R739	X	X	X

#	SJH-1302A-U2[AV-25TS4EE]	SJH-1002A-U2[AV-25TS4EN]	SJH-1702A-U2[AV-25TS4EP]
Y001	0	0	0
Y002	X	X	X
R801	500	500	500
R405	1K	1K	1K
R729	120K	120K	100K
R730	60K	60K	50K

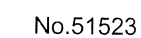
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2-5

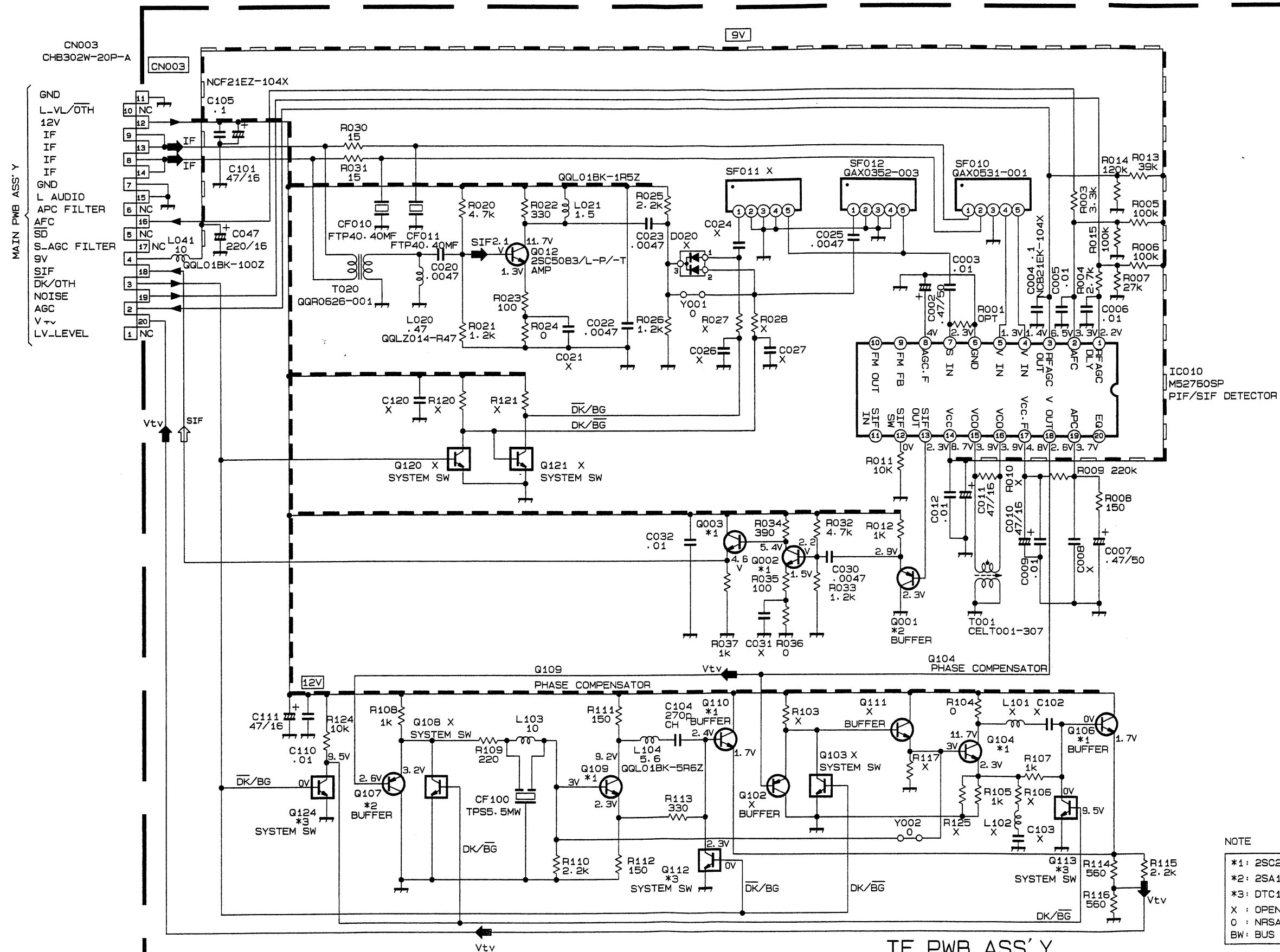
2-6

No.51523

AV-25TS4EE
AV-25TS4EN
AV-25TS4EP



IF PWB CIRCUIT DIAGRAM [For EE, EN Model]



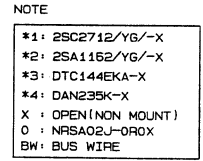
IF PWB ASS'Y
SJH0F301A-U2[AV-25TS4EE]
SJH0F001A-U2[AV-25TS4EN]

CN003
 CHB302W-20P-A

CN003

GND
 L-VL/OTH
 12V
 IF
 IF
 IF
 IF
 GND
 L AUDIO
 APC FILTER
 AFC
 SD
 S.AGC FILTER
 SV
 SIF
 L/OTH
 NOISE
 AGC
 V_{cc}
 LV-LEVEL

MAIN PWB ASS'Y



IC010
TA8865BN
PIF/SIF DETECTOR

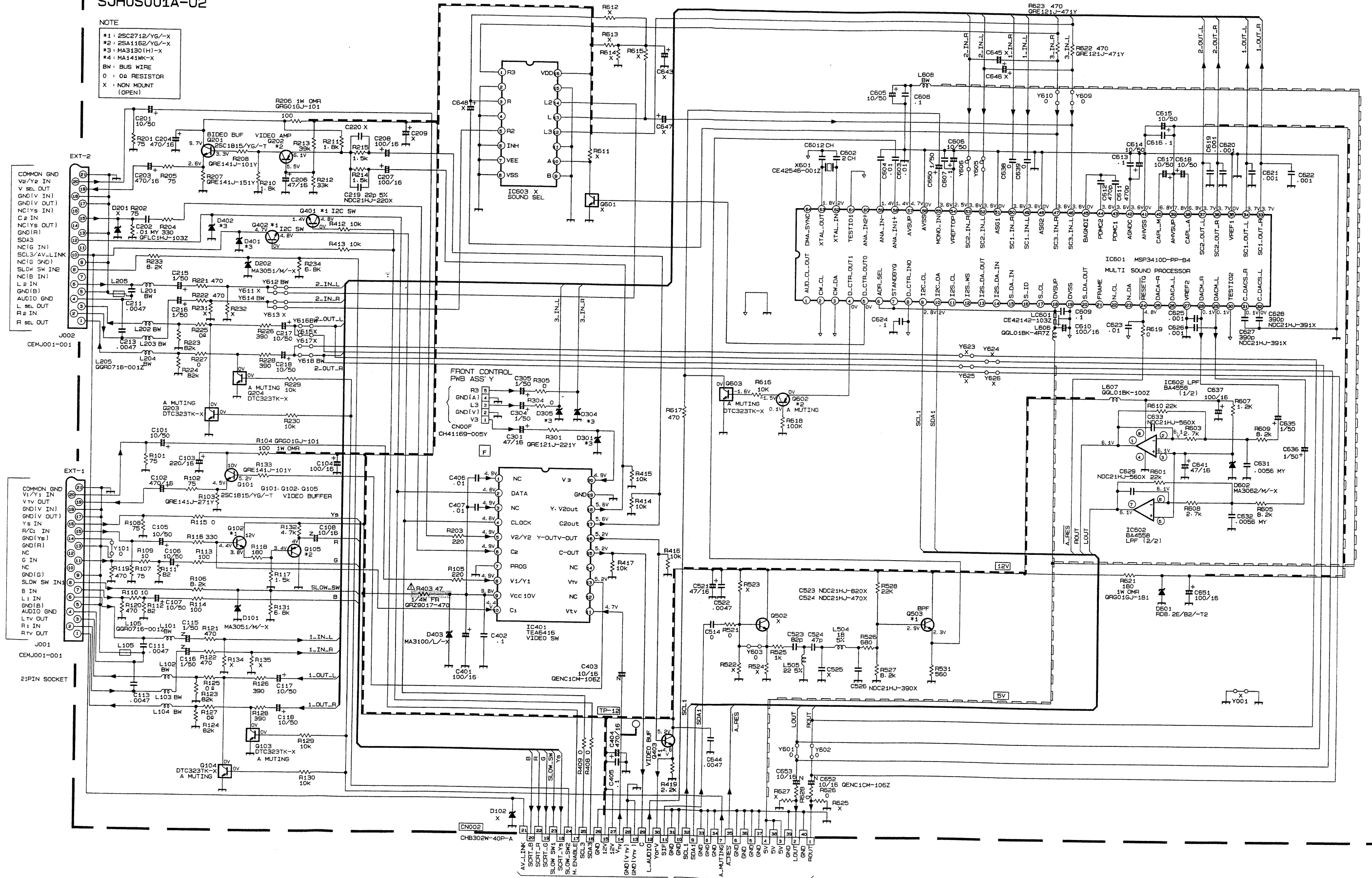
AV SEL & MSP PWB CIRCUIT DIAGRAM

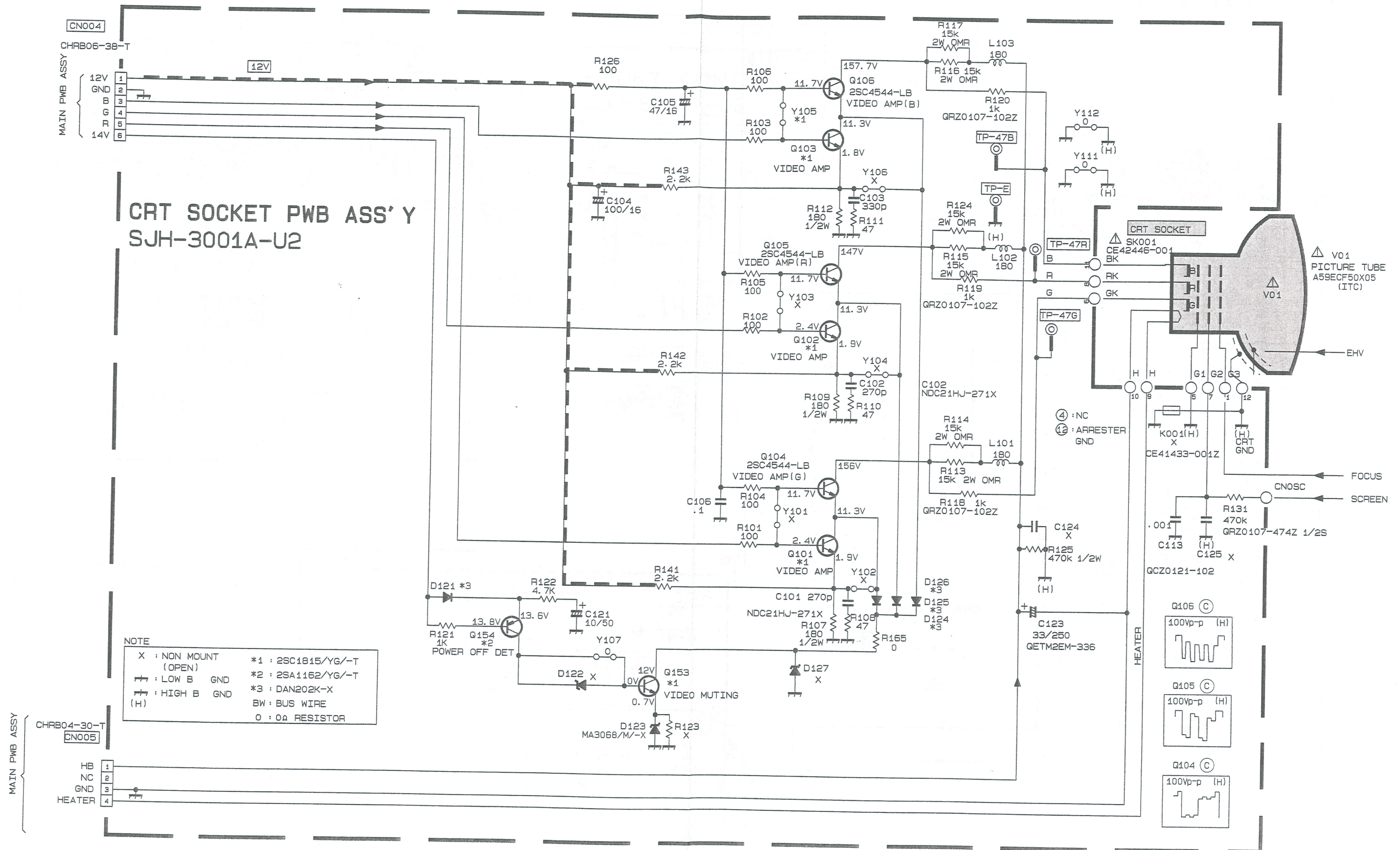
AV-25TS4EE
AV-25TS4EN
AV-25TS4EP

AV-25TS4EE
AV-25TS4EN
AV-25TS4EP

AV SEL & MSP PWB ASS'Y SJH0S001A-U2

NOTE
*1: 2SC2712/YG/-X
*2: 2SA1162/YG/-X
*3: MA3130(H)-X
*4: MA3141W/-X
BW: BUS WIRE
0: 0Ω RESISTOR
X: NON MOUNT (OPEN)







AV-25TS4EE
AV-25TS4EN
AV-25TS4EP
↑ TOP

AV-25TS4EE
AV-25TS4EN
AV-25TS4EP

